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ABSTRACT

Current and future financial aid to students of medicine, osteopathy, and dentistry (MODs) is discussed in the context of federal health manpower objectives. Options for providing financial access to such students are analyzed. The report was prepared for the Senate Budget Committee in response to a request by Senator Lawton Chiles as part of Congressional consideration of the renewal of the Comprehensive Health Manpower Training Act of 1971. Federal involvement in health professions education may have three kinds of objectives; (1) increasing the aggregate supply of health professionals; (2) increasing access of students from all income levels to health professions careers; and (3) improving the geographic and specialty distribution of health professions. Future financial needs are discussed, along with the impact of major legislative proposals. Options for meeting MOD students' financial needs are included. (LBH)

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THE ROLE OF AID TO MEDICAL, OSTEOPATHIC, AND DENTAL STUDENTS IN A NEW HEALTH MANPOWER EDUCATION POLICY

Staff Working Paper

HE 008 210

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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PREFACE

This paper discusses current and future financial aid to students of medicine, osteopathy, and dentistry in the context of federal health manpower objectives and analyzes options for providing financial access to such students. It was prepared for the Senate Budget Committee in response to a request by Senator Lawton Chiles. In keeping with the policy of the Congressional Budget Office, the paper contains no recommendations.

The paper was prepared by Bonnie Lefkowitz, with the aid of Alan Fein and Toni Wright and under the supervision of Stanley Wallack, all of CBO's Division of Human Resources and Community Development. The author wishes to acknowledge the assistance of the Association of American Medical Colleges; the American Association of Dental Colleges; and the Bureau of Health Manpower, Department of Health, Education, and Welfare. Editorial assistance was provided by Patricia H. Johnston.

Alice M. Rivlin
Director

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SUMMARY

Background

The Comprehensive Health Manpower Training Act of 1971, up for renewal during this session of Congress, includes a number of special programs of financial aid for health professions students and educational institutions. This paper discusses student financial assistance and its role in a broader health manpower policy, with emphasis on preparation for careers in medicine, osteopathy and dentistry (MODs).

Federal involvement in health professions education may have three kinds of objectives:

- Increasing the aggregate supply of health professionals. This has been accomplished by aid to educational institutions for expansion and operating support.

- Increasing access of students from all income levels to health professions careers. This has been accomplished primarily through scholarships and low-interest loans to students, although federal antidiscrimination policies have also played a part. Student financial assistance was also believed to complement institutional expansion because of its potential for attracting more applicants.

- Improving the geographic and specialty distribution of health professions--that is, meeting needs for more professionals in underserved localities and for primary care practitioners as opposed to specialists. Methods that attempted to achieve these objectives included forgiving previously incurred loans in exchange for service in shortage areas and project grants to schools for primary care training programs.

Historically, federal support for health professions education has been predicated on meeting society's health care needs and dominated by fears of a shortage in the aggregate supply of doctors. Therefore, the first objective was emphasized, and most resources were channeled into the

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kinds of institutional and student assistance that would increase the numbers of health professionals. Despite the high rate of return on a medical education in particular, more generous federal subsidies were available for health professions students than for students in other fields. Thus meeting the objective of increased supply also helped meet the second objective--more students were provided financial access to health professions careers. The primary mechanism for meeting the third objective, improved distribution, involved simply adding on the forgiveness provision to loans designed to meet the other two goals. However, comparatively few graduates went to shortage areas in exchange for loan forgiveness.

Federal policies have now resulted in substantially expanded training capacity. It has become evident that there will be a concomitant increase in the physician-population ratio--from 158 per 100,000 in 1970 to between 207 and 217 per 100,000 in 1985. The number of applicants to medical school has also risen dramatically, from 14,397 in 1960, of whom close to 60 percent were accepted, to 42,570 in 1974, of whom only 25 percent were accepted. Thus the first objective has been satisfied. Moreover, there is some evidence that further increases in supply, particularly without changes in distribution patterns, may raise health care costs without additional benefits to society.

For the past eighteen months, during which Congress has been considering a major revision in health manpower policy, discussion has focused to an unprecedented degree on the third objective, improving geographic and specialty distribution. Attention appears to have shifted away from increasing aggregate supply, although maintenance of training capacity continues to be a concern.

The mechanism proposed by most new legislation to improve distribution is a major expansion of large (up to $10,000 annually) scholarships granted in exchange for agreements to provide primary care in underserved areas. As a result of increasing the size of scholarships and limiting them to those willing to make a service commitment, numbers of recipients may be much smaller than numbers of students in need of financial aid. Moreover, such scholarships would not be allocated according to income level. Both factors could set back the objective of increasing financial access to health professions careers.

Thus, with the shift in overall health manpower goals, it is much more difficult to ensure financial access to all students through the previously used mechanisms--need-based scholarships and subsidized loans. Without a link to a broader objective, these mechanisms to ensure student financial access are seen by some as unnecessary subsidies. Yet the failure to develop more appropriate methods of student assistance, particularly in view of increasing educational expenses, may tend to limit health professions careers to students from higher-income backgrounds.

Current Situation

Even before the current Congressional debate, the Administration had begun curtailing need-based student aid. According to surveys of how medical students finance their education, dollar growth over the last five years has occurred primarily in scholarships offered by both the Department of Health, Education, and Welfare (HEW) and the Armed Forces in exchange for a service commitment. These service scholarships have gone proportionately more often to middle- and upper-income students than to students from lower-income families. Medical students in financial need have relied increasingly on Guaranteed Student Loans (GSLs), available to all higher education students. The GSL program subsidizes and insures commercial borrowing; thus access to capital is determined by the private market.

While total loan and scholarship aid to medical students from federal and all other sources has more than doubled since 1971, the effect of this growth on individual students has been diminished by rising expenses and enrollment increases over this same five year period. In school year 1970-71 tuition and all other expenses came to $5,529 for the average medical student. Financial aid averaged $1,712, leaving $3,817 to be covered by the student and his family. By 1974-75 expenses had risen to $7,252 and financial aid to meet those expenses to $2,774, leaving $4,478 to be covered by student and family. While the difference between expenses and financial aid increased in absolute dollars, the 17 percent rise did not exceed the growth in family income or in the Consumer Price Index (CPI).

Future Needs and the Impact of New Legislation

Over the next five years, continued growth in tuitions and total expenses is projected. Total expenses per average medical student are expected to increase from the current $7,252 to $9,508 in school year 1978-79. If capitation grants--per student funding to schools for operating costs --were eliminated, as some have proposed, 1978-79 expenses would rise to $10,346 per medical student. Comparable, though less precisely estimated, expenses for the average dental student would increase from $8,100 currently to $10,600 under existing capitation conditions and to $11,500 if capitation grants were eliminated.[1]

The health manpower bill already passed by the House (H.R. 5546) attempts to address the geographic distribution problem by expanding HEW service scholarships administered by the Public Health Service (PHS) and requiring that capitation funds received by schools be repaid by students either in dollars or by practice in underserved areas. After a three-year phase-in period, the House bill would provide service scholarships for roughly 20 percent of all medical students and far fewer dental students. Aid for nonservice scholarship recipients is limited to maintaining funding for the existing program of need-based Health Professions loans. Dollar limits, as well as the current interest rate of 3 percent, would be raised.

The Administration bill (S. 2748) also expands HEW service scholarships and requires schools to set aside admission slots for their recipients as a condition of capitation funding. After phase-in, roughly 15 percent of all medical students and, again, far fewer dental students would receive the service scholarships. Need-based assistance would be allowed to expire.

Thus, for the much larger numbers of nonservice scholarship recipients, aid dollars per enrollee from federal and all other sources under either the House or Administration bill would not keep pace with rising expenses and already scheduled enrollment increases. As shown in Summary Table 1, the difference between expenses and aid

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1. Tuition projections from national surveys of schools conducted by the Association of American Medical Colleges (AAMC) and the American Association of Dental Colleges (AADC) at CBO's request. Nontuition expenses are assumed to rise from current levels with the CPI.

SUMMARY TABLE 1

TOTAL EXPENSES AND AVAILABLE AID PER MEDICAL STUDENT
(Excluding recipients of service scholarships)

	1971	1975	1976	1977	1978	1979
Total Expenses	$5529	$7252	$7798	$8444	$8976	$9508
House Bill						
Aid From All Sources (Excluding Service Scholarships)	1712[a]	2470[a]	2297	2446	2603	2360[b]
Expenses Less Aid	3817	4782	5501	5998	6373	7148
Expenses Less Aid for 1975, Inflated by CPI	--	4782[a]	5035	5292	5557	5835
Additional Funds Required to Meet Expenses	--	--	466	706	816	1313
Administration Bill						
Aid From All Sources (Excluding Service Scholarships)	1712[a]	2470[a]	2164	2187	2153	2048
Expenses Less Aid	3817	4782	5634	6257	6823	7460
Expenses Less Aid for 1975, Inflated by CPI	--	4782[a]	5035	5292	5557	5835
Additional Funds Required to Meet Expenses	--	--	599	965	1266	1625

a. Actual rather than projected levels. There were no service scholarships in 1971.

b. Reflects estimated decrease in new funds for Health Professions loans because House bill does not include 1979 authorizations.

will rise. The additional cost might be met by increased contributions from students' families. To accomplish this, schools might have to accept a greater proportion of students from wealthier families. Since 50 percent of all medical students now come from families with incomes over $20,000, compared with a national proportion of 22 percent for such families, this would shift medical student distribution even further toward those from high-income backgrounds.

However, if one assumes that the ability of students and their families to meet out of pocket costs will rise no faster than the CPI, and that income composition remains unchanged, shortfalls will remain. Based on these assumptions, the table also shows that by 1978-79, additional funds required to meet expenses would be $1,313 annually under the House bill and $1,625 under the Administration bill for the average medical student who does not receive a service scholarship.

Translated into aggregate rather than per student figures, additional funds required to meet expenses under the Administration bill would be $76 million by 1978-79. Shortfalls are likely to be even higher for dental students because they are expected to receive less aid. Thus total additional funds required to meet expenses for all MODs would be at least $109 million in 1978-79. While shortfalls would be less severe under the House bill, additional funds required would still be $59 million for medical students and at least $83 million for all MODs in 1978-79.

This situation would affect those from low-income backgrounds most severely because of their limited ability to increase family contributions. Financial problems of low-income students would be even further exacerbated by a second factor. Under both the House and Administration bills, distribution of aid would actually shift toward those from wealthier families. Service scholarships are likely to remain at least as available and attractive to middle- and upper-income students as to low-income students, either for financial reasons or because they are tied to admission priorities. Assuming that in the future such scholarships are distributed evenly across income class, total federal and nonfederal aid dollars per student with parental income over $25,000 would increase from $1,656 in 1974-75 to $3,040 under the House bill and $2,278 under the Administration bill by 1978-79. Aid dollars per student with parental income under $5,000 would increase only

slightly under the House bill, from the 1974-75 level of $4,435 to $5,068 in 1978-79. Under the Administration bill there would actually be a decrease for low-income students, to $3,774 in 1978-79.

Options for Providing Additional Funds to Meet Mod Students' Expenses

Limiting scholarships to students willing to practice in underserved areas should provide incentives for such service. To the extent the Congress wanted to provide funding to meet the objective of financial access for other students from all income levels, it could do so through a separate loan program.

Useful criteria for a loan program would include the following: First, provision of adequate access to capital for MOD students from all backgrounds. Second, minimizing long- and short-term federal costs, subject to other criteria. Even the subsidies inherent in existing student loan programs could be eliminated if some way were found to delay payment of accrued interest. Third, consideration of students' problems in repaying larger loans, particularly early in their careers when heavy debts may affect their choice of specialty or location of practice. And fourth, feasibility of administration and limits on numbers of recipients so as not to subvert service objectives.

Five loan options are presented here. Three would involve the existing Health Professions loans and GSL programs. Two others are new: a separate and nonsubsidized GSL for MOD students, which would still depend on the private market, and a direct MOD loan program with income-related repayments that could be on the budget or operated by a self-supporting agency that would raise its own capital. Each option is discussed below; impact of major provisions and long- and short-term cost estimates are summarized in Summary Table 2 following the discussion. The cost estimates were made assuming that the options meet additional borrowing needs of MOD students under the Administration bill--$41 million in 1975-76, $66 million in 1976-77, $85 million in 1977-78, and $109 million in 1978-79.

Existing Health Professions Loans. Health Professions loans under proposed legislation would not meet MOD students' financial needs. In addition, as currently administered by schools, limited funds have not been targeted on needy students as effectively as they might be.

The program entails high immediate budget outlays, although long-term costs are lower than with GSLs. Thus expanding the program to meet additional MOD student needs would require outlays of $347 million for four years of operations. Long-term net outlays for the same four years would be $20 million, excluding any interest charges the government itself might incur, if it borrowed money to finance the loans. If one assumes that student interest payments will equal government interest costs, long-term net outlays would consist only of interest subsidies and defaults, or $145 million.

Although the House bill would raise the current 3 percent interest rate to 7 percent, Health Professions loans would remain interest-free during school and advanced training--a questionable subsidy worth close to $400 over the life of the average $1,000 loan.

Some student financing problems still exist because of the ten-year repayment period and would be greater with larger loans. But because of the in-training subsidy, they would be less severe than with GSLs. Administration is facilitated by dealing with schools rather than thousands of private lenders, and coordination with other health manpower objectives is possible.

Nonsubsidized Health Professions Loans. This option would be quite similar to the existing Health Professions loan program except that compounded interest would accrue during school and advanced training to be added to principal when repayments begin.

Outlays involved in expanding Health Professions loans to meet additional MOD students' financial needs would be $347 million--the same as with a subsidized program--after four years of operation. However, if subsidies were eliminated, as this option proposes, repayments of loans made during the same four years would eventually come to $170 million more than outlays, excluding the government's own interest costs. Assuming student interest payments will equal government interest costs, long-term net outlays consist only of $12 million for defaults. Student problems, of course, would be exacerbated by the larger total debt to be repaid in the same ten-year period.

The Existing GSL Program. Availability of loans in sufficient size and numbers to meet MOD students' financial needs is a major problem. Current federal borrowing limits are $2,500 annually, which 17 of 27 intermediate state agencies reduce, usually to $1,500; and $10,000 cumulatively for both graduate and undergraduate years.[2] More importantly, even within these limits, private lenders are extremely reluctant to make more GSLs available or to make loans at the maximum allowable level because of a high default rate combined with the slowness of the federal government in refunding defaults. Delays of up to several months are not unusual, depriving the lender of interest the money could have earned. Banks also complain about the risk involved in repayment periods of up to ten years, as well as low interest rates. Students pay 7 percent and the program can provide a special allowance subsidy to banks of up to 3 additional percentage points. Most recently it did so at 2.25 percent, bringing the rate to 9.25 percent. By comparison, the current uninsured personal loan rate is closer to 11 percent.

Subsidies which are unnecessary for most MOD students constitute another major problem with GSLs. Not only do students borrow at 7 percent rather than the market rate, but the program also pays all interest charges during school for the majority of students. Over the life of the average loan these subsidies will entail payment of more than $450 on every $1,000 borrowed. Thus the incremental budget outlays to meet additional MOD student needs through the existing GSL program would be $56 million after four years of program operation. Long-term net outlays for the same four years of operation would be $164 million, of which $154 million is interest subsidies.

Student payback problems also exist with GSLs because repayment must begin within one year after school, when incomes from residencies are low. Moreover, most banks require equal or decreasing annual instalments, so that payments are large in proportion to income in the earlier years of repayment.

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2. Education legislation submitted by the Administration would raise the cumulative limit to $25,000 but leave the annual limit unchanged. The Congress and the Administration may be reluctant to raise annual limits high enough to meet maximum MOD needs for up to $7,000-$8,000 annually.

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Finally, special changes to relieve problems for MOD students would be complex to administer in the context of the overall GSL program, and coordination with other health manpower objectives might be difficult.

A Separate Nonsubsidized GSL for MOD Students. A new loan program for MOD students only, patterned on the GSL model, could probably meet availability and budget criteria but would exacerbate student payback problems.

Borrowing limits could be raised considerably--to $7,500 or $8,000 annually. Private lenders' objections to GSLs might be overcome by separating MODs from other students, thereby minimizing defaults; by allowing interest to vary throughout the life of individual loans, thereby making repayment periods of up to 15 years more acceptable to banks; and by setting interest closer to market rates.

If all interest were paid by students for the periods both during and after school, unnecessary subsidies would also be eliminated. However, since interest on loans of $8,000 annually would amount to over $3,200 by the fourth year of school, it would have to accrue and be repaid later as part of principal. Banks would probably accept this if they could compound the interest owed, which may require overriding state usury laws. There would be no four-year outlays required to meet additional MOD needs with this option. Long-term outlays consisting of defaults on the four years of borrowing only, would be $17 million.

Even with payment of principal delayed during school and training, as well as a 15-year repayment period, severe student payback problems would remain. Total debt would be much greater than with current GSLs because of larger loans and accrued interest. The private market does not encourage any but the standard repayment structure of equal annual instalments that are disproportionately large in comparison with early income.

The attractiveness of this option to banks might be offset somewhat by administrative problems with still another set of procedures and resistance to any GSL-type program. It could, however, be coordinated with other health manpower objectives in a way that the existing GSL program could not.

A Direct Loan Program With Income-Related Repayments. A new program for MOD students based on the direct loan model but with income-related repayments could meet availability criteria and, in addition, all subsidies could be eliminated without causing problems to students. Initial budget outlays would be high unless the program were operated by a private but government-related agency that would raise its own capital--$327 million for four years of operation. In the long run, however, repayments attributable to the same four years would come to $315 million more than outlays, excluding the government's own interest costs. Assuming that student interest payments equal government interest costs, there would be no long-term outlays.

The equivalent of interest during school compounded at at least 7 percent would eventually be repaid, but in the following manner: According to the amount borrowed, a student would agree to repay a certain percentage of his adjusted gross income annually. This approach would substantially reduce the burden of fixed and equal instalments existing with conventional loans. Repayment would begin after school and continue for 20 years or until a maximum amount is paid--the original loan, plus interest and an insurance premium charged to all borrowers. The insurance premium would cover the portion of their debt that low future income borrowers would be forgiven if not paid after 20 years. It should encourage the participation of students from low-income background who might otherwise be reluctant to incur large debts.

The experimental nature of this option might be a disadvantage. Because repayments would be related to income, this aspect of the program might be more difficult to administer. However, administration would be facilitated by not having to deal with private lenders and coordination with other health manpower objectives would be possible.

Such coordination is important because a universally available loan program with income-related repayments could be more attractive than a service scholarship and thereby subvert efforts to improve geographic distribution. If legislation required schools, as a condition for receiving capitation grants, to set aside entry slots for those who agree to practice in an underserved area, the incentive to accept a service scholarship would be strengthened. Participation in the loan program could also be limited to those schools that agree to set aside a certain number

of slots for service scholarship recipients. However, if legislation does not require these slots to be set aside, it may be important to limit participation in the loan program to those schools which have met an assigned service commitment target.

SUMMARY TABLE 2

COMPARISON OF FIVE LOAN OPTIONS TO MEET ADDITIONAL MOD STUDENT EXPENSES

PROGRAM OPTION / POLICY CRITERIA	Availability of Capital to all MOD Students	Minimizing unnecessary subsidies	Repayment requirements relative to borrowers' earnings	Administrative feasibility and coordination with other manpower objectives	Net budget outlays[a] ($ In Millions) Four Year	Long Term (Excluding Interest to Federal Government)	Long Term (Defaults and Interest Subsidies Only)[b]
1. Expansion of existing Health Professions loans	Yes	No	No	Yes	$347[c]	$ 20[d]	$145
2. A nonsubsidized but similar Health Professions loan program	Yes	Yes	No	Yes	$347[c]	-$170[d]	$ 12
3. The existing GSL program	No	No	No	No	$ 56	$164	$164
4. A separate nonsubsidized MOD GSL	Maybe	Yes	No	Maybe	0	$ 17	$ 17
5. A direct MOD loan program with income-related repayments	Yes	Yes	Yes	Yes			
a. On budget					$327[e]	-$315[d]	0
b. Self-supporting agency (off-budget)					$ 5	0	0

a. Incremental to existing federal outlays. Borrowing requirements are derived from additional funds required to meet expenses for nonservice scholarship recipients under the Administration bill, assuming capitation continues at existing levels. Short-term costs are for four years of program operation, 1976-1979. Long-term costs are those of the same four years of operation after all relevant outlays and repayments are completed.

b. If the federal government makes no money on interest charged and if student interest payments equal government interest, then the net long-term program outlays would consist exclusively of default costs and interest subsidies.

c. Outlays for each of the four years would be $44 million in 1975-76 (FY 1976), $73 million in 1976-77 (T.Q.), $99 million in 1977-78 (FY 1977), and $131 million in 1978-79 (FY 1978).

d. Estimates do not include interest charges the federal government would incur if it had to borrow money to finance student loans.

e. Outlays for each of the four years would be $44 million in 1975-76 (FY 1976), $72 million in 1976-77 (T.Q.), $93 million in 1977-78 (FY 1977), and $118 million in 1978-79 (FY 1978).

INTRODUCTION

For more than eighteen months, Congress has been considering the first major revision in health manpower education policy since 1971. The discussion has focussed to an unprecedented degree on improving the distribution of health care professionals geographically and by type of practice, rather than on increasing their aggregate supply. However, maintenance of training capacity continues to be a concern.

The 93rd Congress ended without agreement between the House and Senate conference managers on how to achieve these distributional objectives. During the second half of the 94th Congress, the area of disagreement between the two houses may narrow, influenced in part by recent Administration support for several provisions of the 1974 Senate bill. Such a consensus would permit the emergence of a policy that, whatever its specifications, is likely to spell out new methods of influencing geographic location and type of practice.

However, until very recently the current deliberations have been marked by their lack of attention to another, previously major objective--that of ensuring financial access to health professions careers for students from all income classes. The aim of this paper is to provide a basis for decisions about student financial assistance and its role in a broader health manpower policy. Emphasis will be placed on preparation for careers in medicine, osteopathy, and dentistry (MODs).[1]

The first chapter outlines federal objectives in supporting health professions education and the mechanisms to achieve those objectives. Then it traces the background of federal involvement from its inception in 1963 and demonstrates how the role of student financial assistance has evolved.

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1. Students of other health professions--veterinary medicine, optometry, podiatry and pharmacy--are not subjects of this paper. Their needs could be met through the options presented here. Alternatively, they could be treated in the same manner as graduate students generally.

The second chapter provides information on the current status of financial assistance to MOD students from federal programs and all other sources.

The third chapter projects future financial needs of MOD students and estimates the extent to which the two major legislative proposals (H.R. 5546, the bill passed by the House in 1975, and S. 2748, the bill introduced at the request of the Administration) will meet these needs.

The fourth chapter reviews arguments for and against a new or increased federal effort to meet MOD students' financial needs, suggests criteria if such a program is to be considered, and examines options in light of the criteria.

CHAPTER I

BACKGROUND OF FEDERAL INVOLVEMENT IN HEALTH PROFESSIONS EDUCATION

Federal involvement in health professions education may have three kinds of objectives:

- Increasing the aggregate supply of health professionals. This has been accomplished by construction grants and other aid to educational institutions for expansion and support of operating costs.

- Increasing access of students from all income levels to health professions careers. This has been accomplished primarily through student financial assistance--scholarships and low-interest loans--although federal anti-discrimination policies have also played a part. Student financial assistance was also believed to complement institutional expansion because of its potential for attracting more applicants and ensuring that talented students from low-income backgrounds would not be excluded.

- Improving the geographic and specialty distribution of health professionals. This includes meeting outstanding needs for primary care practitioners as opposed to specialists, whom some believe are overrepresented, and for more practitioners in underserved localities. The primary mechanisms to attempt to achieve these objectives included forgiving previously incurred loans in exchange for service in shortage areas and project grants to schools for primary care training programs.

The second objective may be characterized as personal in nature, most benefitting the students involved. The first and third are broader in that they benefit all mem-

bers of society by meeting needs for health care.[1] Meeting the needs of educational institutions may be subsumed under one of the three objectives, although it often appears to stand on its own as a determinant of policy.

Unlike most general aid for higher education, where the primary emphasis has been on helping students overcome financial and other barriers, federal support for health professions education has been predicated on meeting society's health care needs. In particular, such support has, from its inception, been dominated by fears of a doctor shortage.[2] This has served as the justification for levels of support for both students and institutions much higher than those in other fields--despite the high rate of return on a medical education.

The Historical Position: Increasing Aggregate Supply

Chart 1 shows the objectives and major components of federal support for health professions training administered by the Department of Health, Education, and Welfare (HEW) and their years of inception. This information is related to the number of applicants and acceptances to medical school.

As long as the primary health care objective was to increase the aggregate supply of doctors, the mechanism for achieving that objective--institutional aid for expansion --was closely linked to student financial assistance allocated according to need. This was especially true when federal support began in 1963. New schools and increased training slots were sought with construction aid. But in

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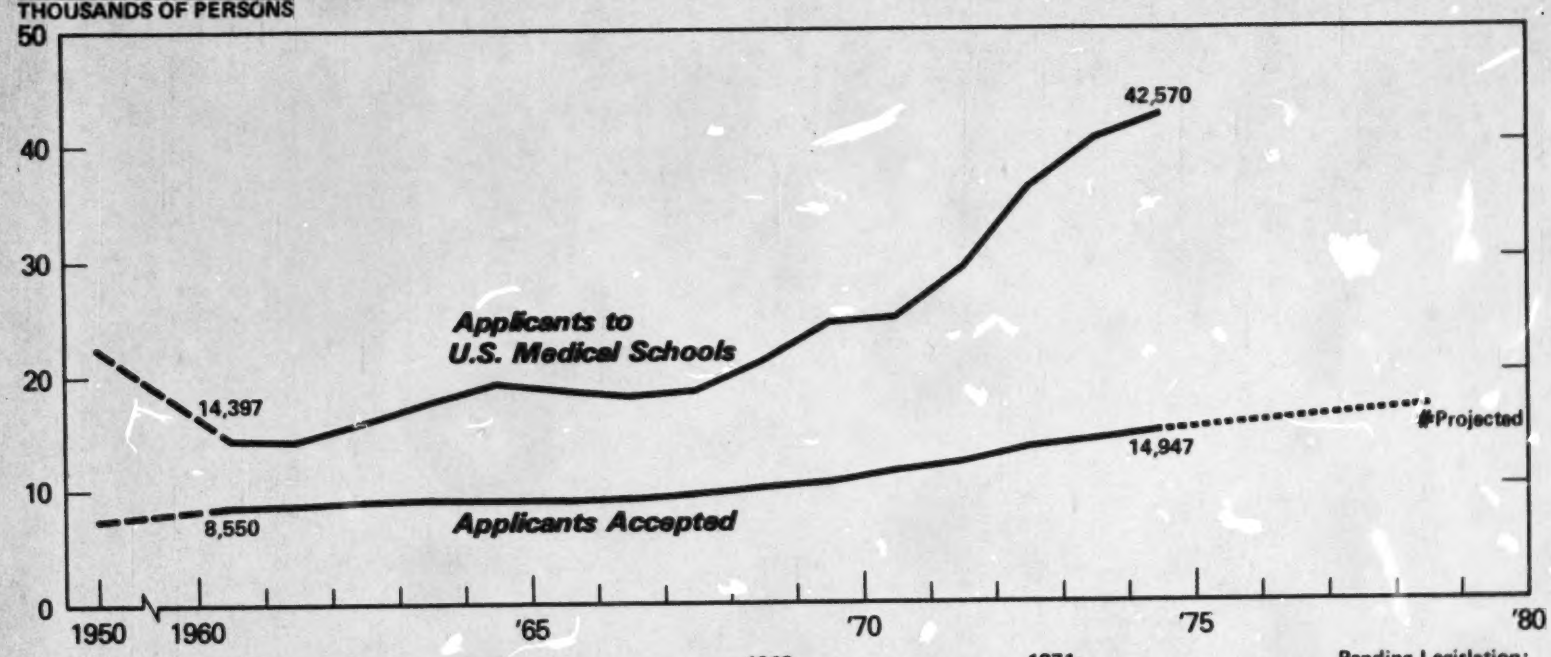
1. Some would argue that opening the health professions to groups with a history of discrimination also meets health care needs, because women might be more likely to establish primary care practices and blacks to serve poor blacks. However it may be preferable that such an objective stand on its own as an issue of equity for those discriminated against because the expectation that certain groups will fulfill needs that others do not may constitute a kind of discrimination in itself.

2. Most federal policy has been determined on the basis of need for physicians, with osteopaths treated in the same way as medical doctors. Dentists and other health professionals have then usually been accorded similar aid without consideration of manpower needs in their own particular fields.

Chart 1

Number of Applicants and Acceptances to Medical School and Changes in Federal Health Manpower Training Policy



	1963:	1965:	1968:	1971:	Pending Legislation:
HEALTH CARE OBJECTIVES	**Increase supply and applicant pool** (construction aid; HP loans)	**Increase supply and applicant pool; affect geographic distribution** (construction aid; HP loans; HP scholarships; loan forgiveness)	**Increase supply and applicant pool; help schools; affect geographic distribution** (construction aid; financial distress aid; HP loans; HP scholarships; loan forgiveness)	**Increase supply and enrich applicant pool; help schools; affect geographic distribution; affect specialty distribution** (financial distress aid; capitation; special project grants; HP loans; HP scholarships; loan forgiveness)	**Affect geographic distribution; affect specialty distribution** (capitation; special project grants; loan forgiveness; service scholarship)
STUDENT OBJECTIVES	**Overcome financial barriers** (HP loans)	**Overcome financial barriers** (HP loans; HP scholarships)	**Overcome financial barriers** (HP loans; HP scholarships)	**Overcome financial barriers; Increase proportion of minorities** (special project grants; HP loans; HP scholarships)	**Increase proportion of minorities** (special project grants)

addition, it was believed necessary to provide need-based student financial assistance to prime the size and quality of the applicant pool that would fill those slots. In the early sixties, the ratio of applicants to acceptances was at its lowest since World War II. There were fears that fewer applicants to choose from would mean lower quality medical students.

Need-based Health Professions loans at 3 percent interest were seen as a way to encourage applicants and to ensure that qualified low-income persons were not excluded. In 1965, these programs were augmented with Health Professions scholarships, to be allocated on the basis of "exceptional need," which were also intended to increase the applicant pool. The addition of a very small loan forgiveness program to induce service in physician shortage areas did not essentially change the basic policy of expanding the supply of doctors.

The same objectives continued to dominate in 1968, when the applicant pool was beginning to expand. Schools which had received federal aid for expansion efforts were given financial distress grants to help them meet increased operating expenses.

In 1971, the way in which the federal government treated institutional needs underwent an important shift from the "last dollar" funding inherent in financial distress grants to "first dollar" operating subsidies in the form of capitation grants allocated on a per student basis if schools agreed to expand. The student loan forgiveness program was expanded, some attempt was made to influence specialty choice as well as geographic distribution of graduates through special project grants to schools, and similar grants directed at increasing the proportion of minority students were made available. Yet these newer efforts were, in effect, voluntary on the part of schools because conditions tying them to receipt of the new capitation grants were weak and not actively enforced. The primary objective was still to increase the aggregate supply, and student assistance programs that facilitated the increase were maintained.

New Directions: Distributional Objectives

However, almost immediately after passage of the 1971 legislation, a reexamination of health manpower policy began. This culminated in the widespread acceptance that the major policy goal should be redistribution of health manpower so as to increase the numbers of primary care practitioners

and those in underserved rural and poor urban areas, rather than increasing supply. A number of factors led to the prevalence of this new health care objective and new mechanisms to achieve it.

First, many were persuaded that no further increases in the aggregate supply of doctors were needed. Expansion, construction, and capitation aid had succeeded. First-year medical school places grew 70 percent between 1965 and 1974. The physician pool was expected to increase accordingly, from 323,000 in 1970 to between 495,000 and 520,000 by 1985. Thus the physician/population ratio was rising and would continue to rise substantially, from 158 per 100,000 in 1970 to between 207 and 217 per 100,000 in 1985.[3]

Second, it became apparent that the medical school applicant pool was expanding even more rapidly than school slots, fueled by the bulge in the population reaching graduate school age.

Third, information about which kinds of federal intervention might accomplish distributional objectives became available and was analyzed for the first time. Those who had believed that the old goal of increasing aggregate supply might also result in distributional benefits through fostering competition appeared to be wrong, or at least the approach was judged inefficient. As the physician/population ratio rose, there was no improvement in geographic or specialty distribution. According to an HEW study, the proportion of physicians in office-based primary care practice actually decreased from 45 percent in 1950 to 31 percent in 1970.[4] Moreover, there was some evidence

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3. The physician/population ratio, projected by HEW, assumes that the net annual increment in new Foreign Medical Graduates (FMGs) will be either 3,800, as it was prior to 1970 (lower figure), or 5,200 as it was after 1970 (higher figure).

4. The increase of medical school graduates choosing residencies in primary care specialties--family practice, pediatrics, internal medicine, and obstetrics and gynecology--that has been cited by the president of the American Medical Association (AMA) is much more recent and coincided with specific federal programs emphasizing primary care. In addition, it is unclear exactly what proportion of those entering such specialties will actually provide primary care, since all but family practice cover large nonprimary care areas.

that simply training additional doctors, particularly in the absence of redistribution, would result in increased care to segments of the population already served more than adequately, thereby raising total health care costs without additional benefits to society.

In terms of geographic distribution, a May 1974 report by the General Accounting Office (GAO) found that the federal loan forgiveness program had little impact, if any. Of an estimated 30,000 medical and dental school graduates who had received Health Professions loans, as of 1973, only 86 physicians and 133 dentists had obtained forgiveness for practicing in areas suffering health care shortages A July 1975 GAO update indicated that an additional 384 physicians and 305 dentists had obtained forgiveness of either federal or private loans in the ensuing two years--a marked increase, but still inconsequential. Similarly, HEW studies of state loan forgiveness programs showed that they had little effect in increasing the number of health care professionals in areas that needed them most.

The reasons generally cited for the failure of the loan forgiveness program include poor marketing of the program, its addition to an effort designed for other ends, absence of service commitment by the students, and lack of student debts large enough to make the service attractive by comparison. These factors helped lead to the program of large scholarships granted in exchange for an agreement to practice in areas designated by HEW's Public Health Service (PHS), usually as members of the National Health Service Corps (NHSC). Such PHS scholarships, as well as a similar but smaller program of Physician Shortage Area (PSA) scholarships, were instituted in 1973 on a limited basis. Under a scholarship program, recipients could be subject to double repayment as a penalty for not honoring the commitment.

Where specialty distribution was concerned, the methods believed to work involved institutions rather than individual students. Although special project grants appeared to have had some success in increasing primary care emphasis, stronger conditions for schools or outright regulation of specialty choice was believed by some to be necessary for such emphasis to become the rule rather than the exception. Interest in primary care appeared to conflict with the goals of many teaching institutions and also could be financially disadvantageous, in part due to low outpatient reimbursement for medicare, medicaid, and private insurance.

Little Emphasis on Student Financial Needs

Because there no longer appeared to be a need for increasing the applicant pool, the equity of heavily subsidized training for health professions whose members were virtually assured of high future incomes was opened to question for the first time. There was a growing feeling that a student receiving a subsidy in the form of a scholarship or even a low interest loan (whatever his need) should repay the favor in dollars or service. This feeling was extended to capitation grants, which, because of their student-based formula and assumed relationship to tuition levels, were seen as individual rather than institutional aid. Thus not only were the old need-based Health Professions scholarships and low-interest loans deprived of their link to the broader objective of increasing aggregate supply, they were seen by many as irrelevant or even contradictory to the new distributional goals.

In addition, such programs had been only moderately effective in directing aid to financially needy students. While more students from low-income backgrounds benefitted from them, the dollar size of the individual loans and scholarships was low relative to the maximum permissible awards. Scholarships were, in fact, larger in size for students from high-income groups and loans were equal across income class. However, in conjunction with recruitment policies, Health Professions loans and scholarships did appear to have helped lower financial barriers. Relative to national family income distribution, the proportion of medical students from low-income backgrounds increased 25 percent between 1970-71 and 1974-75. Also relative to national income distribution, the proportion of medical students from families with incomes over $25,000 decreased 28 percent.

Special project grants appeared to have helped increase the proportions of groups previously discriminated against and were not seen as inequitable. However, these grants have been a minor factor in both health manpower education policy and the entire affirmative action effort, which is believed to be related much more directly to federal anti-discrimination legislation.

CHAPTER II

CURRENT STATUS OF FINANCIAL ASSISTANCE TO MOD STUDENTS

Because of the growing dissatisfaction with Health Professions loans and scholarships, phaseouts had begun even before the current Congressional debate. Moreover, the new, larger scholarships granted in exchange for a service commitment concentrated available aid on fewer recipients and did not require a means test. Thus medical and other graduate level health professions students have been forced to rely on the Guaranteed Student Loan (GSL) program, which operates through the private lending market, and on Armed Forces scholarships which are also granted in exchange for service.

While total aid from all sources has doubled in the last five years, its effect on individual students has been diminished by rising expenses and increasing enrollments. Nearly all growth in aid dollars has occurred in large service scholarships, which have gone more often to students from middle- and upper-income backgrounds than to those from lower-income families in comparison with their respective proportions of the medical student population.

This chapter will describe aid available from HEW, other federal sources and nonfederal sources, and analyze data on levels and distribution of aid over the last five years.[1]

Sources of Federal and Nonfederal Aid

Student aid other than that from personal or family sources is generally classified by whether it is refundable (loans) or nonrefundable (scholarships and grants). Of a current listing of eight kinds of loans available to medical students (some but not all are available to osteopathic and dental students), three are federally funded or subsidized:

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1. 1970-71 data are projected for 40,181 students in 101 medical schools from 2,973 responses to 3,290 questionnaires in HEW's survey, How Medical Students Finance Their Education. 1974-75 data are projected for 53,554 students in 114 medical schools from 7,261 responses to 23,233 questionnaires in a national student survey conducted by the Association of American Medical Colleges (AAMC), similarly titled How Medical Students Finance Their Education. While comparative data are available only for medical students, rough estimates of current aid and expenses will be made later in this paper for osteopathic and dental students.

the GSL and National Direct Student Loan (NDSL) programs, administered by the Office of Education (OE) in HEW, and the Health Professions loan program, administered by the Health Resources Administration (HRA) in HEW. Other loan sources include states, schools, the AMA Educational Research Foundation (ERF), the Robert Wood Johnson Foundation (RWF), and nonguaranteed bank loans.

Of nine kinds of scholarships available, four are from federal sources: Armed Forces pay and scholarships for members attending school and three kinds of scholarships administered by HRA in HEW--Health Professions scholarships and service-oriented PHS and Physician Shortage Area (PSA) scholarships.[2] Other scholarship sources are states, schools, and private foundations, including RWF.

In 1974-75, federal programs accounted for 50 percent of a total $153 million in aid to medical students. Aid administered by HEW-HRA--the programs that will be affected by the current legislative debate--accounted for 25 percent of the total. Table 1 supplies information on provisions of federal aid programs.

Changing Levels of Aid From 1970-71 to 1974-75

Table 2 shows total dollars, number of recipients, and dollars per student enrolled for each source where comparable data were available. Total aid increased from $69 million in 1970-71 to $153 million in 1974-75. But enrollment has increased by nearly 35 percent, so that when dollars per student enrolled are calculated, aid has actually risen by two-thirds, from $1,712 in 1970-71 to $2,868 in 1974-75. Even if the estimated 6,400 students receiving $43 million in highly concentrated HEW-HRA and Armed Forces service scholarships are excluded, 1974-75 dollars per student are still $2,470, a 44 percent increase.

Loans formerly accounted for 61 percent of all aid, or $41.8 million to 21,700 recipients, with $27 million in scholarships going to 19,000 recipients. Loans now account for 49 percent of all aid, or $75 million to 26,400 recipients, with $78 million in scholarships going to 25,100 recipients.

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2. Two other categories of nonrefundable aid are federal in source but are neither considered scholarships nor instruments of education policy: veterans benefits and research grants administered by the National Institutes of Health (NIH) in HEW.

TABLE 1

PROVISIONS OF MAJOR FEDERAL PROGRAMS AIDING HEALTH PROFESSIONS STUDENTS

	Year First Funded	Maximum Award	Interest to Student	Payback Provisions	Administering Agency/ Organization	Criteria for Recipients	Service Requirements
SCHOLARSHIPS							
Federal Health Professions	1965	$3,500 annually	N.A.	N.A.	HEW-HRA	Extreme Need	None
Public Health Service	1974	$10,000 annually	N.A.	N.A.	HEW-HRA	Medical, dental, and osteopathy students	Minimum of 2 years 1 year for each year of participation
Physician Shortage Area	1974	$5,000 annually	N.A.	N.A.	HEW-HRA	Medical and osteopathy students	Minimum of 2 years 1 year for each year of participation
Armed Forces Health Professions	1973	Full tuition and educational expenses plus $4,000 stipend	N.A.	N.A.	DoD	None	
Armed Forces Active Duty Pay		Full tuition and educational expenses plus average $9,000 pay	N.A.	N.A.	DoD		
LOANS							
Federal Health Professions	1965	$3,500 annually	3%	Begins 1 year after study which may include internship and residency; over 10 years. No interest until repayment period.	HEW-HRA	Need	None
National Direct Student Loans	1958/59	$2,500 first 2 years. $10,000 cumulative ceiling for undergraduate and graduate years.	3%	Begins 9 months to 1 year after study; over maximum of 10 years. No interest until repayment period.	HEW-OE	Need	None
Guaranteed Study Loan	1965/66	$2,500 annually; $10,000 cumulative ceiling for graduate and undergraduate years.	7%	Begins 9 months to 1 year after study; over maximum of 10 years. Some students have interest subsidized until repayment period.	HEW-OE	All students eligible. Need is criteria for subsidy of interest.	None

TABLE 2

AID RECEIVED BY MEDICAL STUDENTS BY SOURCE, 1970-71 AND 1974-75

	1970-71 (40,181 Students)				1974-75 (53,554 Students)			
	Total $	Size of Award	Number of Recipients	$/Student Enrolled	Total $	Size of Award	Number of Recipients	$/Student Enrolled
SCHOLARSHIPS	27,000,000	1,199	18,885	671	78,329,400	3,119	25,116	1,467
HEW					17,047,388	2,685	6,339	318
Health Professions	6,600,000	964	6,831	164	(4,818,502)	(1,070)	(4,521)	(90)
Physician Shortage					(3,007,058)	(4,275)	(703)	(56)
PHS					(9,221,828)	(7,611)	(1,211)	(172)
NIH Research	1,800,000	844	2,009	42	2,799,538	2,175	1,279	52
Other Federal	1,300,000	846	1,607	34				
Armed Forces					30,591,510	6,878	4,470	574
GI Bill					4,738,951	2,672	1,780	89
States	1,800,000	581	3,214	46	4,062,714	1,053	3,876	76
All Other	15,500,000	1,752	8,840	385				
Private					2,025,945	1,161	1,745	38
Schools					10,981,765	1,268	8,668	205
Other					6,081,589	1,543	3,983	115
LOANS	41,846,000	1,310	21,698	1,041	74,939,892	2,841	26,375	1,401
Health Professions	11,053,000	1,084	10,045	271	21,007,921	1,515	13,921	392
States	5,959,000	1,404	4,018	140	2,821,377	1,897	1,485	53
Schools	5,083,000	1,269	4,018	127	3,091,958	1,118	2,845	58
All Other	19,751,000			503				
NDSL					2,500,111	1,790	1,390	47
GSL					32,820,309	2,056	15,975	613
AMA-ERF					3,722,160	1,401	2,653	70
Johnson					687,368	856	803	13
Private Bank					4,100,631	2,095	1,963	77
Other					4,188,057	1,856	2,255	78

SOURCES: Derived from national surveys, How Medical Students Finance Their Education, by HEW (1970-71) and AAMC (1974-75).

The HEW-HRA proportion of total aid has remained roughly the same at 25 percent in 1970-71 and 1974-75, although the HEW-HRA scholarships have increased almost three-fold and HEW-HRA loans doubled. In 1970-71 Health Professions scholarships (the only HEW-HRA scholarships then in existence) to 6,800 students accounted for $6.6 million, compared with $17 million to 6,300 recipients from all three HEW-HRA scholarships. Health Professions scholarship aid was reduced to $4.8 million in 1974-75. Thus HEW-HRA scholarship growth has taken place only in the new service programs that tend to concentrate aid on fewer recipients.

While 1970-71 figures separating other sources of loans are of questionable validity, it is clear that GSLs have increased greatly, reaching a 1974-75 level of $33 million to 16,000 recipients. The three-year-old Armed Forces Health Professions scholarship program accounted for much of the remaining growth, since by 1974-75 such scholarships, together with Armed Forces pay, had reached a level of $31 million to 4,500 recipients.

Aid and Expenses, 1970-71 and 1974-75

Chart 2 presents comparative data on aid and expenses for medical students and data on expenses for other health professions students. When aid dollars per student enrolled are subtracted from total expenses for 1970-71 ($5,529) and 1974-75 ($7,252), the difference that must be made up by personal earnings or family contributions has increased as follows: 1970-71 expenses were comprised of $1,508 in tuition and $4,021 in all other expenses. Subtracting total aid of $1,712 left an average of $3,817 to be borne by each student enrolled. By 1974-75 tuition had risen to $2,092, a 39 percent increase over 1970-71, and other expenses to $5,160, a 28 percent increase over 1970-71. Subtracting effective aid of $2,774[3] leaves an average of $4,478 per student, an increase of $661, or 17 percent over the 1970-71 level.

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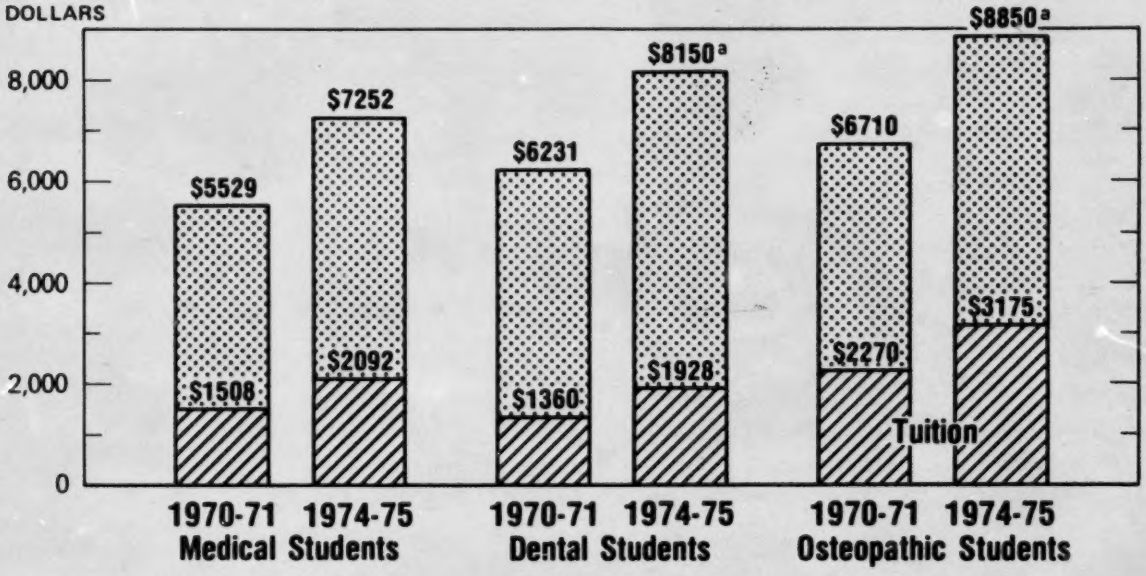
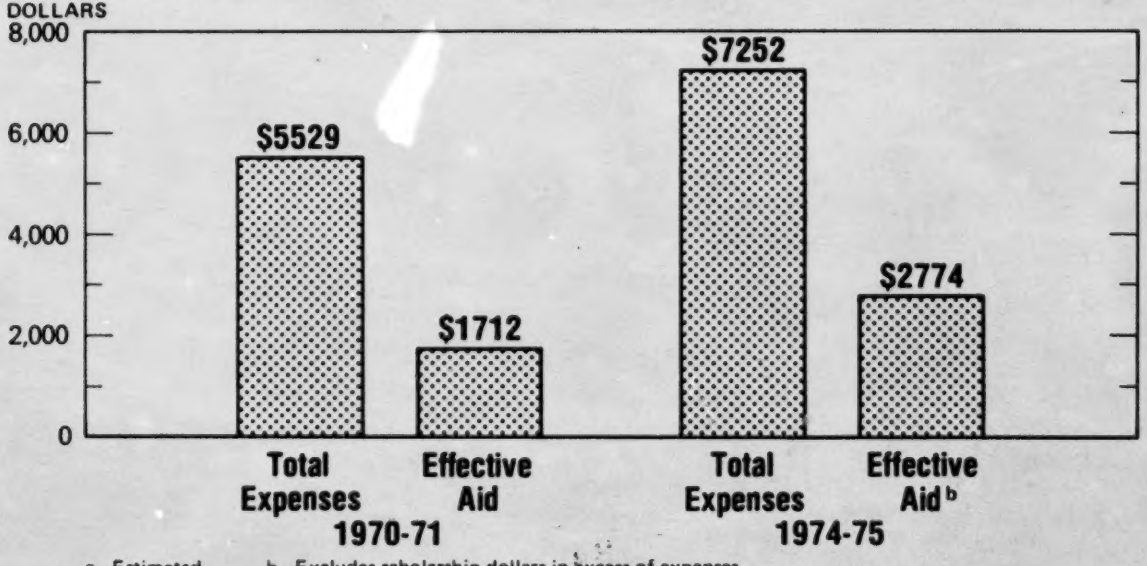
3. The actual aid figure of $2,868 must be reduced when calculating aid effective in meeting expenses on an average dollar per student basis, because the new larger service scholarships can be in excess of actual expenses--in this case $38 per student enrolled for PHS scholarships and $56 per student enrolled for Armed Forces active duty pay.

Chart 2

Tuition and Total Expenses for Average Medical, Dental, and Osteopathic Students, 1970-71 and 1974-75



Total Expenses and Effective Aid for Average Medical Students, 1970-71 and 1974-75



a. Estimated. b. Excludes scholarship dollars in excess of expenses.

SOURCES: Tuition and expense figures for 1970-71 from HEW's *How Health Professions Students Finance Their Education:* for 1974-75 from AAMC, American Association of Dental Colleges (AADC) and American Association of Colleges of Osteopathic Medicine. Aid figures from AAMC's 1974-75 national student survey and HEW's *How Medical Students Finance Their Education.*

It should be noted that despite the absolute dollar increase in the difference between expenses and aid, it has decreased as a proportion of total expenses and risen more slowly than the Consumer Price Index (CPI). Thus in real terms it has actually fallen. Interestingly, if the 1974-75 aid figure of $2,470, exclusive of service scholarship dollars and recipients, is used, the difference for the remaining students averages $4,782, an increase of 25 percent over 1970-71, which is closer to the CPI rise but still not an increase in real terms.

Based on proportional increases in tuition, a similar pattern of increasing differences between expenses and aid can be postulated for dental and osteopathic students.

Distribution of Aid By Parental Income Class

Table 3 presents 1974-75 data on total aid dollars per medical student enrolled and numbers of recipients, by source and parental income class. Due to the large percentage of medical students believed not to be supported by their parents, parental income is not an accurate measure of need. However, it is relevant in identifying those from disadvantaged backgrounds. Students from such backgrounds, supported or not, appear to be receiving more than others when all aid sources are taken together, but less than others for some individual categories, particularly the federal service scholarships that have shown the most growth. Absolute numbers of both HEW-HRA loans and scholarship awards to students from poor and near poor backgrounds have decreased from 1971-72 to 1974-75.

In 1974-75, scholarship dollars from all sources per student enrolled with parental income of less than $5,000 averaged $2,014. For students with parental income of $5-10,000, the average was $2,193; and for those with parental income over $25,000, $912, compared with the all-student average of $1,467. Dollars per student with parental income of under $5,000 were higher than for any other parental income class from Health Professions and PSA scholarships, but lower than those for any other parental income class from PHS and Armed Forces scholarships. Non-HEW scholarship dollars per student were greatest for those with parental income of $5-10,000 and second greatest for those with parental income of $10-15,000.

TABLE 3

MEDICAL STUDENT AID DOLLARS PER STUDENT ENROLLED AND TOTAL NUMBER OF RECIPIENTS
BY PARENTAL INCOME CLASS, 1974-75

Parental Income Class	$5,000		$5,000-10,000		$10,000-15,000		$15,000-20,000		$20,000-25,000		$25,000		Total	
Number of Students	3,213		5,355		9,640		8,033		6,962		20,351		53,554	
	$ Per Student	No. Recip-ients	$ Per Student	No. Recip-ients	$ Per Student	No. Recip-ients	$ Per Student	No. Recip-ients	$ Per Student	No. Recip-ients	$ Per Student	No. Recip-ients	$ Per Student	No. Recip-ients
SCHOLARSHIPS	2,014	2,465	2,193	3,781	1,874	5,878	1,714	4,315	1,394	3,239	912	5,438	1,467	25,116
HEW-HRA Subtotal	618	915	476	1,133	364	1,594	258	933	269	663	249	1,101	318	6,339
Health Professions	199	668	167	897	144	1,296	86	702	58	447	40	509	90	4,521
Physician Shortage	294	215	114	132	51	106	38	75	25	45	24	130	56	703
PHS	125	56	195	154	169	211	134	157	186	171	185	462	172	1,211
NIH Research	40	95	35	88	33	189	55	127	63	194	63	586	52	1,279
Armed Forces	297	183	730	589	786	1,088	843	904	562	581	367	1,125	574	4,470
GI Bill	170	215	139	287	106	400	78	247	91	246	54	385	89	1,780
States	131	350	135	603	93	846	88	777	61	498	43	802	76	3,876
Private	133	350	94	471	47	491	38	269	26	164	3	46	38	1,745
Schools	389	907	403	1,493	272	2,048	246	1,523	208	1,281	74	1,416	205	8,668
Other	236	469	181	640	163	1,035	108	553	103	492	59	794	115	3,983
LOANS	2,421	2,426	2,000	3,715	1,802	6,248	1,666	4,703	1,511	3,649	744	8,634	1,401	26,375
Health Professions	872	1,670	643	2,244	598	3,883	477	2,641	358	1,735	131	1,748	392	13,921
NDSL	97	159	83	243	51	302	48	231	59	186	26	269	47	1,390
GSL	865	1,408	822	2,214	766	3,725	774	2,994	702	2,345	351	3,289	613	15,975
States	58	111	93	250	81	461	71	239	38	186	25	238	53	1,485
Schools	102	254	72	375	60	620	61	426	74	484	39	686	58	2,945
AMA-ERF	141	326	78	301	83	571	65	366	80	395	47	694	70	2,653
Johnson	19	87	23	132	18	211	13	134	12	111	7	128	13	803
Private Banks	117	191	96	221	61	355	80	336	98	290	64	570	77	1,963
Other	150	215	90	250	84	461	77	433	100	357	54	539	78	2,255

SOURCE: Derived from national survey, How Medical Students Finance Their Education, by AAMC

In 1971-72, 6,554 students from poor or near poor backgrounds, roughly 60 percent of all such students, received some HEW-HRA scholarship aid. In 1974-75, 2,048 students from similar backgrounds received HEW-HRA scholarships, comprising 24 percent of all such students.

Loan dollars per student with parental income of under $5,000 averaged $2,421; and with parental income over $25,000 the average was $744, compared with the all-student average of $1,401. Dollars per student from Health Professions loans, GSLs, and NDSLs were higher for students from poor backgrounds than for those from any other parental income class. Only state loans were higher for students from middle-income rather than lower-income classes. When taken together, nonfederal loan dollars per student were greatest for those with parental income of under $5,000.

In 1971-72, 9,835 students from poor or near poor backgrounds, roughly 90 percent of all such students, received Health Professions loans. In 1974-75, 3,914 students from poor or near poor backgrounds, comprising 46 percent of such students, were receiving the same loans.

CHAPTER III

FUTURE FINANCIAL NEEDS AND THE IMPACT OF THE MAJOR LEGISLATIVE PROPOSALS

While the financial burden placed on health professions students and their families appears not to have been excessive between 1970-71 and 1974-75, this could be substantially changed over the next few years.

Schools report that tuitions will rise, perhaps precipitously by 1978-79. Under the bill passed by the House (H.R. 5546) or that proposed by the Administration (S. 2748), total levels of aid would not keep pace with expenses. Thus, out-of-pocket costs would increase faster than students' ability to meet such costs through their earnings or family contributions even if that ability rises with the CPI. Moreover, distribution of new aid would be heavily skewed toward students from middle- and upper-income families. Finally, neither bill would address inequities in current programs.

This chapter will project tuition and expenses through 1978-79 and analyze the future effect of both major legislative proposals on rising needs in terms of aggregate aid levels, distribution by parental income class, and problems with existing programs.

Future Expenses

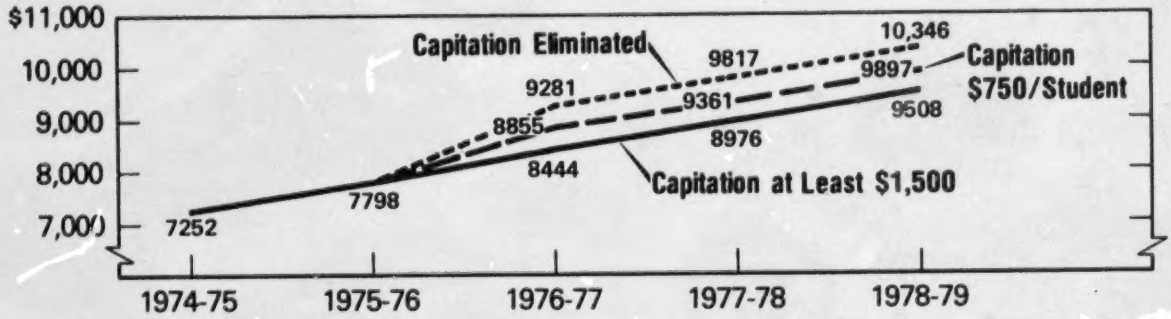
Against a background of increasing expenses and out-of-pocket costs in the past, tuitions will continue to rise, according to special surveys of medical and dental schools conducted at CBO's request by the AAMC and the American Association of Dental Colleges (AADC). Other student expenses will probably continue to rise with the CPI.

Projected tuitions and total expenses for medical and dental schools are provided in Chart 3. Assuming little change in current capitation grant support, the AAMC predicts an increase in average tuition of approximately 50 percent, from $2,092 in 1974-75 to $3,212 in 1978-79.

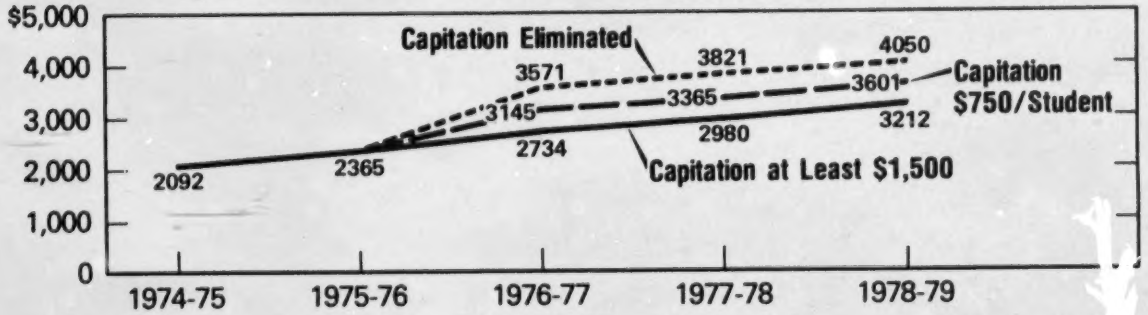
Chart 3

Medical and Dental School Tuition and Expenses Projected Under Varying Conditions of Federal Capitation Support, 1974-75 to 1978-79

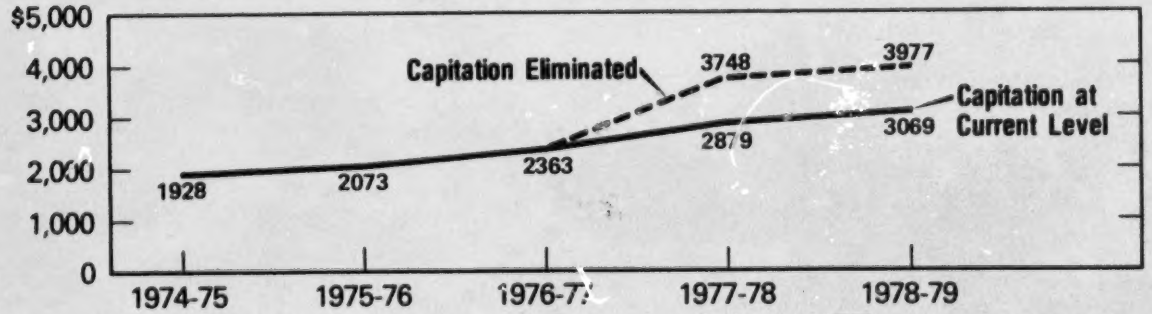
Average Medical School Expenses Projected Under Three Conditions of Federal Support



Average Medical School Tuition Projected Under Three Conditions of Federal Support



Average Dental School Tuition Projected Under Two Conditions of Federal Support



SOURCES: Tuition projections from national surveys of schools conducted by the AAMC and the AADC. Nontuition expenses are assumed to rise from current levels with the CPI, as they have in the past.

While neither of the two major legislative proposals would reduce capitation substantially, such reductions have been actively discussed. In addition, the new legislation may include conditions that would prompt schools to refuse capitation and raise tuitions instead. If capitation support were cut approximately in half from its 1974-75 level of $1,600 to $750 per student, the medical schools report tuition would increase about 75 percent to $3,601 by 1978-79. And if capitation were eliminated, tuition would increase 100 percent to $4,050.[1]

The AADC reports that similar increases in average tuition are planned by dental schools--from $1,928 in 1974-75 to $3,069 by 1978-79 if capitation is continued, a 59 percent increase, and to $3,977 by 1978-79 if capitation is eliminated, a 106 percent increase.[2] Other health professions schools found it difficult to make precise projects, but nearly all of their national organizations predicted substantial increases.

Some believe tuition increases are desirable because they force students to assume more responsibility for their education. Actual medical school costs are approximately $12,000 annually per student, with 50 percent now borne by the federal government. However, unless some way is found to finance educational costs, students will face serious short-term problems.

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1. A total of 48 of the 114 medical schools (30 of the 45 private schools and 18 of the 69 public schools) responded to the AAMC survey, with projections for all three years and at all three levels of aid. Although the rate of increase predicted by public schools was considerably higher than that predicted by private schools, we have used the private rate rather than a composite for two reasons: the low response rate for public schools and the difficulty in predicting tuitions often controlled by state legislatures.

2. Based on responses from 49 of the 59 dental schools in the AADC survey.

In addition to rising tuitions, living expenses are also increasing. Total medical student expenses, calculated by using the CPI to inflate the nonschool share, are projected at $9,508 by 1978-79 if capitation continues, and as high as $10,346 if capitation is eliminated. They would be higher still for private schools, particularly those like Georgetown, George Washington, Tulane, and Dartmouth, which have already raised tuitions to $5,000 or more.

Projected Impact of Major Legislative Proposals on Levels and Distribution of Aid

Both major legislative proposals would pour additional money into student aid, greatly increasing the federal share of total assistance. However, aggregate levels would not keep pace with increased enrollments or rising expenses. Since the new aid would be used primarily to obtain service commitments, present concentration on fewer, not necessarily needy, recipients would intensify and students from higher-income backgrounds would receive a larger proportion of available funds at the expense of lower-income students.

H.R. 5546, passed by the House in 1975, would require students to repay capitation grants received by schools with either service or money within a four-year period, although the maximum payment would be only $2,000 per year. It would greatly increase funding for PHS scholarships, with a double payback for failure to serve, but receipt of the scholarships would not be linked to school requirements or admission priorities. Finally, the House bill would maintain funding for Health Professions loans at roughly current levels but raise the current 3 percent interest rate to 7 percent. New funds for the other HEW-HRA programs would be phased out as already planned.

S. 2748, proposed by the Administration, would require schools to set aside a certain percentage of first-year slots for students who agreed to serve in a shortage area, adding the incentive of admission priority to a service scholarship. It would also increase funding for PHS scholarships, with a double payback penalty for failure to serve, and require schools to ensure that 50 percent of all residencies under their control be in primary care specialties. All new funds for other HEW-HRA aid programs would be phased out as currently planned.

Levels of Aid in Legislative Proposals

Levels of financial aid for health professions students channelled through HEW-HRA, including currently budgeted loans and scholarships not requiring new authorization, are presented in Table 4 for the House and Administration bills, 1975-76 through 1978-79.[3]

Under the House bill, medical students would receive $35.6 million in 1975-76 in PHS scholarships based on a service commitment, $71.1 million in 1976-77, $106.7 million in 1977-78, and an estimated $106.7 million in 1978-79. Also under the House bill, medical students would receive $22.4 million through the Health Professions loan program in 1975-76, $23.8 million in 1976-77, $25.5 million in 1977-78, and an estimated $19 million in 1978-79.

Under the Administration proposal, medical students would receive $22 million in PHS scholarships in 1975-76, $34.8 million in 1976-77, $47.5 million in 1977-78, and $56.6 million in 1978-79. A reduction in scholarship size from the present $10,000 to $7,000 would be phased in for new recipients and should be complete after 1978-79. Also under the Administration proposal, medical students would receive $19.1 million through the Health Professions loan program in 1975-76, $18.5 million in 1976-77, $15.6 million in 1977-78, and $10.9 million in 1978-79.

Impact of Aggregate Aid Levels

Table 5 summarizes the impact of future aid levels on those medical students who do not receive service scholarships. It is assumed that all aid dollars not channelled through HEW-HRA remain at 1975-75 levels and that total aid available in each successive year is shared by a slightly larger number of students because of enroll-

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3. It should be remembered that figures given are for authorizations, not appropriations or actual outlays. The latter may run considerably lower. For example, a total of $60 million was authorized for Health Professions loans during fiscal years 1974 and 1975, but only $36 million was appropriated.

TABLE 4

TOTAL AUTHORIZATIONS, CAPITATION, AND STUDENT AID
UNDER TWO MAJOR LEGISLATIVE PROPOSALS,
1975-76 to 1978-79

	1975-76	1976-77	1977-78	1978-79
Administration Proposal (S. 2748)				
Total Authorization	$309,000,000	$309,000,000	$309,000,000	$309,000,000
HP Capitation				
Total	126,500,000	123,400,000	120,000,000	118,200,000
$ Per Student in MOD Schools	1,600[a]	1,500	1,500	1,500
HP Student Aid				
PHS Scholarships[b]	32,000,000	36,200,000	51,000,000	61,600,000
PSA Scholarships[c]	1,500,000	1,000,000	500,000	--
HP Scholarships[c]	3,500,000	3,500,000	1,800,000	--
HP Loans[c]	24,000,000	20,000,000	12,000,000	--
Medical Student Aid				
PHS Scholarships[b]	28,200,000	31,900,000	45,400,000	54,200,000
PSA Scholarships[c]	1,500,000	1,000,000	500,000	--
HP Scholarships[c,d]	1,458,000	1,458,000	729,000	--
HP Loans[c,d]	11,520,000	9,699,000	5,620,000	--
House Bill (H.R. 5546)				
Total Authorization	$515,850,000	$590,700,000	$653,600,000	
HP Capitation				
Total	208,000,000	215,000,000	214,000,000	
$ Per Student in MOD Schools	2,100	2,100	2,000	2,000
HP Student Aid				
PHS Scholarships	40,000,000	80,000,000	120,000,000	120,000,000[a]
PSA Scholarships[c]	1,500,000	1,000,000	500,000	--
HP Scholarships[c]	3,500,000	3,500,000	1,800,000	--
HP Loans	30,000,000	30,000,000	30,000,000	15,000,000[a]
Medical Student Aid				
PHS Scholarships	35,600,000	71,100,000	106,700,000	106,700,000[a]
PSA Scholarships[c]	1,500,000	1,000,000	500,000	--
HP Scholarships[c,d]	1,458,000	1,458,000	729,000	--
HP Loans[d]	14,549,000	14,549,000	14,549,000	7,275,000[a]

a. Estimated.

b. Actual funds received by students for each school year will differ because of some forward funding: for medical students $21.9 million in 1975-76; $34.8 million in 1976-77; $47.5 million in 1977-78; and $56.6 million in 1978-79.

c. New authorization not necessary.

d. Funds available to students will also include 11 percent school share and returns to school loan funds of $6.3 million in 1975-76; $7.7 million in 1976-77; $9.4 million in 1977-78; and $10.9 million in 1978-79. This would result in the following totals for medical students under the Administration bill receiving Health Professions loans: $19.1 million in 1975-76; $18.5 million in 1976-77; $15.6 million in 1977-78; and $10.9 million in 1978-79. For medical students under the House bill receiving Health Professions loans: $22.4 million in 1975-76; $23.8 million in 1976-77; $25.5 million in 1977-78; and an estimated $19 million in 1978-79.

TABLE 5

EXPENSES, AID AND OUT-OF-POCKET COSTS TO MEDICAL STUDENTS WHO ARE NOT SERVICE SCHOLARSHIP RECIPIENTS UNDER TWO MAJOR LEGISLATIVE PROPOSALS THROUGH 1978-79

Administration Bill	1974-75 (For comparative purposes)	1975-76	1976-77	1977-78	1978-79
Total Expenses	$ 7,252	$ 7,798	$ 8,444	$ 8,976	$ 9,508
Total Nonservice Scholarship Aid	2,470	2,164	2,187	2,153	2,048
Expenses Less Aid	4,782	5,634	6,257	6,823	7,460
Expenses Less Aid for 1974-75, Inflated Using CPI		5,035	5,292	5,557	5,835
Additional Funds Required to Meet Expenses	--	599	965	1,266	1,625
House Bill					
Total Expenses	$ 7,252	$ 7,798	$ 8,444	$ 8,976	$ 9,508
Total Nonservice Scholarship Aid	2,470	2,297	2,446	2,603	2,360
Expenses Less Aid	4,782	5,501	5,998	6,373	7,148
Expenses Less Aid for 1974-75, Inflated Using CPI		5,035	5,292	5,557	5,835
Additional Funds Required to Meet Expenses	--	466	706	816	1,313

SOURCES: Derived from AAMC survey, How Medical Students Finance Their Education, AAMC tuition and enrollment projections, and provisions of House and Administration bills.

ment increases.[4] Service scholarship dollars and recipients are excluded and the remaining aid dollars are calculated for the average nonservice scholarship recipient enrolled under the House and Administration bills.

Dollars per nonservice scholarship recipient in 1975-76 would be $2,297 under the House bill and $2,164 under the Administration bill, both less than the 1974-75 level of $2,470 cited in Chapter II. Dollars per nonservice scholarship recipient would continue at roughly the same level for 1976-77 and 1977-78 and fall to $2,048 in 1978-79 under the Administration bill. Under the House proposal, comparable dollars would be $2,446 in 1976-77 and $2,603 in 1977-78, but would fall to $2,360 in 1978-79.[5]

When aid dollars are subtracted from estimated expenses per student, the difference, which must be borne by the student or his family, rises from $4,782 in 1974-75 to $7,460 in 1978-79, a 56 percent increase under the Administration bill. Under the House bill the difference rises to $7,148, a 49 percent increase. Both increases are much greater than the 25 percent rise in comparable figures between 1970-71 and 1974-75.

The additional costs might be made up by increased contributions from families. To accomplish this, schools could accept a greater proportion of students from wealthier families. Since 50 percent of all medical students now come from families with incomes over $20,000, compared to 22 percent for the entire population at this income

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4. The legislative proposals are not particularly expansionary, but increases planned by schools in advance will take place. Enrollment for 1975-76 is 55,797. The AAMC estimates a net rise of approximately 1,300 students annually (previous year's enrollment minus 3 percent attrition plus 3,000 new entries)--57,123 students in 1976-77, 58,409 in 1977-78, and 59,657 in 1978-79.

5. The drop-off is caused in part by the fact that no authorization for 1978-79 is included in the House bill. CBO has estimated new money for Health Professions loans at half the 1977-78 level, based on past phaseouts with similar provisions for aid to prior recipients only.

level, this would shift physician distribution even further toward those from high income backgrounds. However, if one assumes students' and their families' ability to meet such costs will rise no faster than the CPI, and that income composition remains unchanged, additional funds will be required. This sum--the amount to which a new aid proposal could address itself--would be $466 per medical student who does not receive a service scholarship in 1975-76, $706 in 1976-77, $816 in 1977-78, and $1,313 in 1978-79 under the House bill. Under the Administration proposal, it would be $599 in 1975-76, $965 in 1976-77, $1,266 in 1977-78, and $1,625 in 1978-79. Thus additional funds required to meet expenses for all medical students who do not receive service scholarships could be as high as $76 million in 1978-79. Similar and possibly larger requirements can be postulated for dental and osteopathic students, so that incremental aid required to meet the needs of all MOD students might be as high as $109 million under the Administration bill by 1978-79.

Distribution of Aid By Parental Income Class

The concentration by the Congress on large scholarships linked to a service commitment and the reduction in real terms of financial aid for nonservice scholarship recipients would affect poorer students more severely because of their limited ability to meet additional costs. In addition, their problems would be exacerbated by anticipated changes in the distribution of all aid by income class. Table 6 shows projected distribution of all medical student aid dollars based on the assumption that PHS scholarships, which have no need criteria, will be distributed evenly across parental income class. (While these now tend to go to students from middle- and higher-income classes, the demand from needy students will probably be increased by decreases in other aid.) It was also assumed that Health Professions loans and the other HEW-HRA scholarships being phased out will be distributed across income class in the same proportion as they are now and that all other loans and scholarships, whose levels are assumed constant, will also be distributed as they are now.

Aid dollars per student with parental income of less than $5,000 would be lower than in 1974-75 in every year under the Administration proposal--$3,774 in 1978-79 compared with the 1974-75 level of $4,435. The same figure would increase slightly to $5,068 in 1978-79 under the House bill because it retains need-based Health Professions loans. However, both proposals would increase dollars per student in middle- or upper-income classes.

TABLE 6

AID DOLLARS AND HEW SCHOLARSHIP DOLLARS PER MEDICAL STUDENT AND NUMBER OF HEW-HRA SCHOLARSHIPS BY PARENTAL INCOME CLASS UNDER TWO MAJOR LEGISLATIVE PROPOSALS THROUGH 1978-79

1974-75				1975-76			1976-77			1977-78			1978-79		
Total Aid $/Student Enrolled	HEW-HRA Scholarships $/ Student Enrolled	No. of HEW-HRA Scholarship Recipients		Total Aid $/ Student Enrolled	HEW-HRA Scholarship $/ Student Enrolled	No. of[a] HEW-HRA Scholarship Recipients	Total Aid $/ Student Enrolled	HEW-HRA Scholarship $/ Student Enrolled	No. of[a] HEW-HRA Scholarship Recipients	Total Aid $/ Student Enrolled	HEW-HRA Scholarship $/ Student Enrolled	No. of[a] HEW-HRA Scholarship Recipients	Total Aid $/ Student Enrolled	HEW-HRA Scholarship $/ Student Enrolled	No. of[a] HEW-HRA Scholarship Recipients
			HOUSE												
$4,435	$ 618	915	$5,000	$4,426	$ 795	560	$4,973	$1,377	769	$5,463	$1,891	815	$5,068	$1,787	646
4,193	476	1,133	5-10,000	4,344	747	757	4,890	1,335	1,106	5,393	1,871	1,271	5,060	1,787	1,077
3,676	365	1,594	10-15,000	3,949	721	1,193	4,504	1,313	1,820	5,026	1,860	2,203	4,718	1,787	1,939
3,380	258	933	15-20,000	3,738	692	837	4,296	1,288	1,360	4,826	1,848	1,758	3,804	1,787	1,616
2,905	268	663	20-25,000	3,250	681	674	3,812	1,279	1,127	4,348	1,843	1,497	4,135	1,787	1,400
1,656	249	1,101	25,000	2,111	656	1,615	2,594	1,257	2,941	3,148	1,832	4,199	3,040	1,787	4,093
2,868	318	6,339	All Students	3,160	694	5,636	3,724	1,290	9,123	4,257	1,848	11,743	4,028	1,787	10,771
			ADMINISTRATION												
$4,435	$ 618	915	$5,000	$3,717	$ 548	475	$3,829	$ 743	595	$3,845	$ 877	559	$3,774	$ 947	482
4,193	476	1,133	5-10,000	3,792	500	616	3,908	701	816	3,945	858	845	3,981	947	804
3,676	365	1,594	10-15,000	3,422	473	938	3,548	679	1,298	3,604	848	1,435	3,568	947	1,447
3,380	258	934	15-20,000	3,326	444	624	3,458	654	925	3,528	835	1,118	3,505	947	1,206
2,905	268	663	20-25,000	2,960	434	490	3,102	646	750	3,184	831	943	3,174	947	1,045
1,656	249	1,101	25,000	1,977	408	1,077	1,821	623	1,838	2,259	820	2,579	2,278	947	3,056
2,868	318	6,339	All Students	2,856	449	4,237	2,996	655	6,224	3,075	836	7,853	3,062	947	8,044

SOURCE: Derived from How Medical Students Finance Their Education, Association of American Medical Colleges, draft report, 1975, and provisions of House and Administration health manpower bills.

a. Actual figures may be slightly lower if any Health Professions scholarship recipients also receive service scholarships.

Table 6 also provides evidence of the impact of the switch to large, service-based scholarships in terms of numbers of HEW-HRA scholarship recipients. Those from poor and near poor backgrounds would generally decrease while those from high-income backgrounds would increase markedly, continuing the trend already noted for the last four years.

Continued Problems With Existing Programs

According to the assumptions incorporated into the preceding figures, problems with those existing federal aid programs on which nonservice scholarship recipients would continue to depend are left unresolved by the major legislative proposals. Both the House and the Administration bills imply by omission a further increase in reliance on the GSL program. Primarily because of banks' reluctance to increase this form of aid, as cited by the American Bankers Association (ABA) as well as HEW surveys of lenders, the private market is not likely to meet future MOD student needs without major restructuring of the program. While the House bill slows the phaseout of Health Professions loans, it does not add sufficient funds to meet rising expenses.

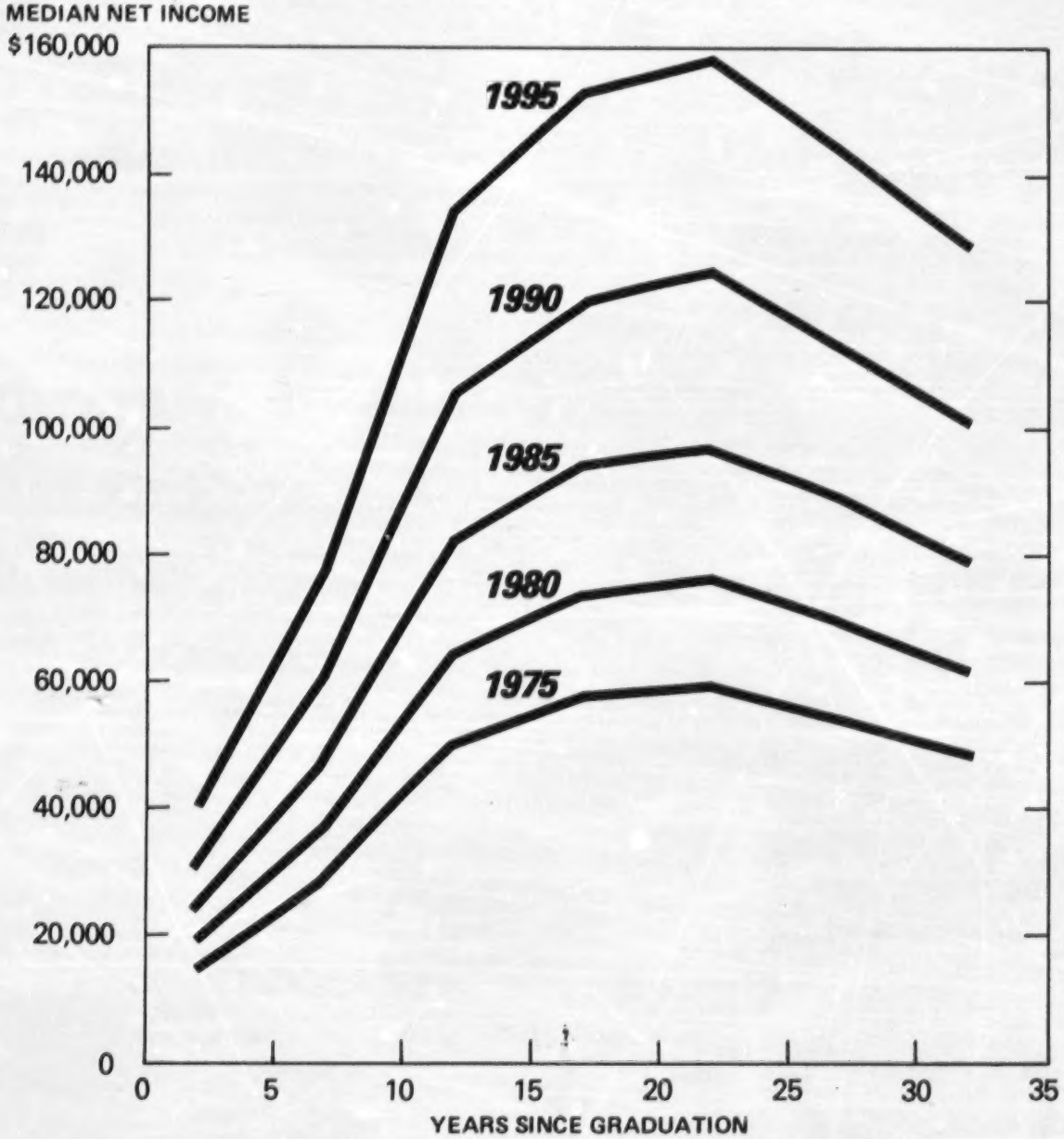
In addition to the adequacy of future aid levels and the equity of their distribution, there are other problems with forcing nonservice scholarship recipients to rely on programs that provide aid much as it has been given in the past. Neither GSLs nor Health Professions loans are particularly efficient in meeting MOD student needs because they do not take advantage of such students' unique situation--extremely high educational costs, but a high rate of return on training for almost all students in later years. Both programs provide subsidies that are unnecessary for the vast majority of MOD students, given their high lifetime earnings. Chart 4 gives projections of median net physician income in 1975, 1980, 1985, 1990, and 1995 by the number of years since graduation from medical school.

The Guaranteed Student Loan Program

The GSL program was initiated in 1965 to subsidize and insure commercial borrowing. It currently does so for loans of up to $2,500 annually but with a cumulative limit of $10,000 for undergraduate and graduate studies combined. Repayment is at 7 percent interest over a maximum of 10 years. It begins within one year after studies cease and may be delayed further only for government service.

Chart 4

Median Net Income, All Physicians, By Year Since Graduation, 1975, 1980, 1985, 1990, and 1995



SOURCE: Unpublished data from Social Security Administration, HEW, 1975.

Eighty-five percent of GSL borrowers have their interest paid during school and the grace period by the federal government. The program pays up to an additional 3 percent in special allowance interest subsidies on behalf of all borrowers to induce bankers to make the loans. Most recently the special allowance has been 2.25 percent.

Unlike other programs where access to capital is determined by funding levels, GSL depends on nonfederal lenders (banks, schools, credit unions). In some cases, intermediary guarantors (states and nonprofit agencies) superimpose their own borrowing limits.

There are a number of problems with GSLs that would only be exacerbated with increased dependence on the program by MOD students, including availability and size of loans, the cumulative limit of $10,000, the expense of subsidies in light of questionable need, and the difficulties posed to students by the 10-year repayment period.

For two reasons there may not be a significant increase in the size of loans even if federal limits were raised. First, state agencies (there are 22), or statewide private nonprofit agencies (there are five) are encouraged to insure GSLs instead of the federal government. Fifteen of the state agencies lower the federal ceiling, most of those to $1,500, as do two of the private nonprofit agencies. Second, banks place a ceiling on the portion of their lending portfolios allocated for GSLs, which is then distributed among a large number of students, usually by rationing the amount an individual can borrow. In 1974-75 the average GSL to medical students was $2,056, compared with the federal ceiling of $2,500, but with considerable variation in size of loan.

Reports of lack of availability are supported by the fact that numbers of recipients have not kept pace with total enrollment in institutions of higher education. At times, medical students may have difficulties simply because of uncoordinated information--students or financial aid offices must contact many sources before obtaining a loan. Lack of availability may be mitigated where the school has committed itself to be the lender of last resort. But major problems exist with banks, which provide about 75 percent of all GSLs.

According to a 1975 report by the ABA, members are reluctant to make GSLs because of low interest rates. At the most recent subsidy of 2.25 percent, income to banks is limited to 9.25 percent rather than the prevailing market rate of over 11 percent for personal loans. The fact that GSLs are guaranteed provides some advantages. But the ABA also claims that guarantors of GSLs refund on the defaults (which are increasing rapidly in number) very slowly. Several months is not an unusual wait. Further, the banks claim that OE is inconsistent in its definition of "due diligence" with which defaultors must be pursued, and that schools don't notify them when students move or graduate. A third major complaint of the ABA is that the federal government continually changes its regulations, causing constant administrative headaches.

In addition to these factors, a second survey of banks released in 1975 by OE cites lower income in general and long repayment periods as further complaints about GSLs. That study found that, without changes in the program, only 29 percent of lenders plan to increase their GSL volume, most of them smaller banks. Again, the needs of even more MOD students are unlikely to be met by relying on an apparently unresponsive private market.

Students are more likely to reach the $10,000 cumulative limit when the school itself is the lender and size of loans is not subject to bank limitations. It should be noted that the Administration has introduced education legislation which would increase the cumulative GSL limit to $25,000 but leave annual limits unchanged.

Current subsidies, which would increase proportionately with borrowing, are expensive. GSLs remain attractive in that they use the private market and do not involve as large immediate expenditures as direct federal loans. However, over the life of the loan, each $1,000 borrowed will entail about $450 in both kinds of interest subsidies paid by the federal government. Moreover, such subsidies may not be needed for MOD students, most of whom could fully afford to repay all educational costs, including full interest, if they had some way of deferring the payment.

Though not now a major complaint, the 10-year repayment period, particularly under the terms most banks require (equal or decreasing annual payments) could be a problem for MOD students with the larger loans they will need. Annual payments will be increasingly difficult to meet

early in the new graduate's career. In turn, this situation could work against distributional objectives by pushing students toward more lucrative specialty practices in wealthy areas.

The Health Professions Loans Program

The Health Professions loan program, the original financing device for health manpower education policy, was enacted in 1963 and first funded in 1965. Administered through school loan funds, it now provides loans of up to $3,500 to health professions students in "need," although the average grant was $1,515 in 1974-75. Recipients pay no interest during school or during advanced training or government service. Repayment is delayed for the same period; loans are then repaid over a period of 10 years at 3 percent interest.

Funding levels in the House bill alone would not be sufficient to meet increased expenses. In addition, schools' allocation of the money has always been difficult to control, resulting in low average grants and less than optimal effectiveness in focusing on students from the most needy backgrounds. Despite the increase from 3 percent to 7 percent interest proposed in the House bill, Health Professions loans would continue to provide a subsidy by requiring that no interest be charged during school and advanced training. This foregone interest amounts to $400 on each $1,000 borrowed. The subsidy may be inequitable because it is given to a very limited group, as well as inefficient because the recipients do not need it.[6]

Finally, while direct loans result in lower federal cost than GSLs because subsidies are slightly less and repayments offset past outlays, a major disadvantage is that they require large and immediate budget outlays.

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6. NDSLs, on which Health Professions loans were modeled and which are available to higher education students generally, provide similar subsidies but in a much smaller proportion to the number of potential beneficiaries.

CHAPTER IV

OPTIONS FOR MEETING MOD STUDENTS' FINANCIAL NEEDS

The previous discussion indicates that aid to MOD students provided by a combination of existing programs and proposed legislation could involve problems of adequacy, efficiency, and equity. The Congress may decide to provide funds to meet the additional MOD students' financial needs. If so, a simple expansion of the methods now being proposed to affect distributional objectives would be the least efficient way of providing access to capital for large numbers of students. A separate and distinct program of repayable aid to meet students' financial needs would be more efficient. If such a program were formulated together with other health manpower initiatives, a coordinated policy might be easier to achieve.

This chapter will describe problems with using the same aid mechanism to meet both distributional objectives and student needs, develop criteria for a separate program of repayable aid, and evaluate five loan options according to the criteria.

Difficulties in Meeting Distributional Objectives and Student Needs Through the Same Program

Chapter I discussed the reasons for the divergence of ways in which health care objectives and students' financial needs are met by federal health manpower policy. Those reasons strongly support the concept of two separate and distinct approaches, one for each kind of objective, rather than a single policy that might compromise both goals.

Subsidies attractive enough to induce service are inequitable unless limited to those whose service is actually required--possibly far fewer than those needing aid. Large service scholarships are particularly inefficient as well in dealing with the needs of students for access to capital. One key reason is that some total awards are in excess of financial needs and thus service scholarships help fewer students than could be helped for the same amount of money.

Even if it were determined that the nation required as many service-obligated graduates as there were students who need aid (for example, the 50 percent of students who now receive loans instead of the 15 to 20 percent who would receive scholarships under the Administration and House bills), there are other disadvantages. First, severe maldistribution may be a short-term problem, and large service scholarships may be a short-term policy the federal government will wish to discontinue at some point in the future. It is hoped that as more graduates are sent to practice in shortage areas, more health professionals will locate in such areas of their own accord, because of better support services and increased opportunities for professional exchange. In addition, if national health insurance were enacted, more direct incentives than scholarships might be available to affect geographic distribution. Conversely, student needs for financing a very costly education are not likely to disappear, and options for dealing efficiently with those needs may take time to establish.

Second, service scholarships themselves are extremely expensive, and the costs of maintaining as many NHSC members in active practices as there are service-obligated graduates must also be considered. A decision to provide such aid for a large proportion of students enrolled should be based clearly on how many obligated graduates are needed and how much the Congress is willing to pay for them, rather than on mixed objectives.

It should be noted that the use of a single program of large loans instead of scholarships to meet both distributional objectives and student needs also poses problems. Because loans and loan forgiveness programs have been tried and found wanting in their impact on geographic location, the distributional objective could be seriously undermined.

Loan Options to Meet MOD Students' Financial Needs

The following criteria can be used to evaluate repayable options for meeting MOD students' financial needs:

1. Consistent availability of adequate levels of aid--including incentives to increase funds if the private market is utilized--and access to capital for MOD students of all economic levels.

2. Minimizing unneeded subsidies and utilizing MOD students' ability to assume costs.

3. Methods for dealing with repayment problems in relation to borrowers' future earnings.

4. Administrative feasibility and coordination with other health manpower policies.

5. Low long-term and short-term costs to the federal government.

Five major options are presented here. Three would involve existing programs: (1) expanding the Health Professions loans program beyond the levels proposed in the House bill, with additional funds going only to MOD students and retaining the federal government as supplier of capital; (2) the same expansion of Health Professions loans with an additional change to a completely unsubsidized program; and (3) attempting to utilize the GSL program so that MOD students' needs are met by the private market and within the overall context of all higher education assistance. Two others are new programs: (1) a separate nonsubsidized GSL program for MOD students, which would still depend on the private market; and (2) a program of direct MOD loans with income-related repayments that could be "on the budget" or operated by a self-supporting agency that would raise capital.

Table 7 provides short- and long-term cost data for each of the five options, assuming four years of program operation.[1] The cost estimates were made assuming that the loan options meet the additional borrowing needs of MOD students not receiving service scholarships under the Administration bill of $41 million in 1975-76, $66 million

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1. More detailed information on the various cost components is provided in Appendix A, which is available on request. Long-term net and gross cost projections assuming continuous, rather than four-year, operation of each option are provided in Appendix B, also available on request.

TABLE 7

RELATIVE FOUR-YEAR NET OUTLAYS, TEN-YEAR NET PROGRAM OUTLAYS, AND LONG-TERM OUTLAYS FOR FOUR-YEAR OPERATION OF FIVE LOAN OPTIONS TO MEET MOD STUDENTS' ADDITIONAL BORROWING REQUIREMENTS, WITH AND WITHOUT CAPITATION

(In millions of dollars)

LOAN OPTION	1975-76	1976-77	1977-78	1978-79	Total Four-Year Outlays 1975-79	Ten-Year (1988-89) Net Program Outlays (exclusive of government interest costs)[a]	Long-Term Net Program Outlays (exclusive of government interest costs)[a]	Long-Term Net Program Outlays (defaults and interest subsidies)[b]
With Capitation								
1. Expanded Health Professions Loans	44	73	99	131	347	160	20	145
2. Nonsubsidized Health Professions Loans	44	73	99	131	347	39	- 170	12
3. Expanded Guaranteed Student Loans (GSL)	4	10	16	26	56	157	164	164
4. Nonsubsidized MOD-GSL Loan Program	0	0	0	0	0	10	17	17
5. a. Direct Loans with Income-Related Repayments	44	72	93	118	327	52	- 315	0
b. Self-Supporting Loan Agency with Income-Related Repayments	2	2	1	0	5	0	0	0
Without Capitation[c]								
1. Expanded Health Professions Loans	44	136	163	200	543	253	30	227
2. Nonsubsidized Health Professions Loans	44	136	163	200	543	66	- 267	19
3. Expanded Guaranteed Student Loans (GSL)	4	14	27	41	86	247	253	253
4. Nonsubsidized MOD-GSL Loan Program	0	0	0	0	0	15	26	26
5. a. Direct Loans with Income-Related Repayments	44	134	155	180	513	81	- 494	0
b. Self-Supporting Loan Agency with Income-Related Repayments	2	2	1	0	5	0	0	0

a. Some long-term net program costs and ten-year net program costs are negative because repayments, including accrued interest, offset program costs. Figures do not include cost to the government of borrowing money.

b. If the federal government makes no money on interest charged and if student interest payments equal government interest, then the net long-term program outlays would consist exclusively of default costs and interest subsidies.

c. Elimination of capitation for four operating years would result in savings of $335 million elsewhere in health manpower expenditures. However, if capitation were phased out rather than abruptly terminated because of its impact on the training institutions, these savings would be reduced.

in 1976-77, $85 million in 1977-78, and $109 million in 1978-79. Costs are calculated both with and without continued capitation funding to schools.[2]

The following analyses of each option refer to the cost data in Table 7 as well as to the qualitative criteria listed above.

Expanding Health Professions Loans for MOD Students

With this option, the loan limit would be raised to $2,500 plus tuition, from the current total of $3,500, and interest to 7 percent, from the present 3 percent, as proposed in the House bill. In addition, the program would be expanded to provide the additional funds required to meet MODs' expenses. Its chief drawbacks are its high and immediate cost and the perpetuation of subsidies.

Equitable distribution of funds among MOD students might be a problem if present administration through schools, which has not been optimally effective in targeting aid on needy students, continues unchanged. However, this becomes less significant if funding provides adequate levels of aid for all MODs.

The fact that the loans are interest-free during school and residency training, without subsequent recovery of the foregone income, is an unnecessary federal subsidy of MOD students, who need to delay interest but could repay it later.

Repayment problems, admittedly less severe because interest is foregone during both school and advanced training, would still be exacerbated with larger Health Professions loans. The ten-year repayment period would come early enough in the health professional's career to induce him to choose a more lucrative specialty or type of practice to facilitate payback.

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2. Some support the elimination of capitation because they consider it a form of student assistance that allows schools to keep tuitions lower than they would be without it. Though it has other purposes, capitation may be a student subsidy if meaningful conditions are not attached to it. CBO has therefore also calculated outlays for each option assuming capitation were eliminated, tuitions raised as predicted in Chapter III, and borrowing increased. Although the figures reflect immediate elimination, it should be noted that it may not be feasible to do so without a phaseout period.

Administrative problems would be minimized because this option builds on a program already in operation. The present location of the Health Professions loan program in HEW-HRA would facilitate coordination with other health manpower objectives, such as limiting loans in each school to the number of students not needed for a service commitment, or conditioning schools' participation in the program on acceptance of capitation grant requirements.

The federal outlays for meeting MOD students' additional borrowing requirements over the next four years with Health Professions loans would be $347 million, comprised of the basic borrowing requirements and the foregone income due to the fact that no interest is charged during school and advanced training--the latter because the interest-free period is an implicit subsidy to students that the government pays for. Long-term net outlays--when all outstanding loans made in four years of operation are repaid--would be $20 million, excluding the government's interest cost. Assuming that student interest payments will equal government interest costs, long-term net outlays would consist only of interest subsidies and defaults or $145 million.

If capitation were eliminated, saving $335 million elsewhere in the legislation, four-year outlays would rise to $543 million and the long-term net outlays, excluding government interest costs, would be $30 million. If long-term net outlays consist only of interest subsidies and defaults, they would be $227 million.

A Nonsubsidized Health Professions Loan Program for MOD Students

This option would be very similar to an expansion of the current Health Professions loan program, with the loan limit raised to $2,500 plus tuition, and interest raised from 3 to 7 percent, as proposed in the House bill. However, compounded interest would accrue during school and advanced training, to be added to principal when actual repayments began. As with the first option, the chief drawback would be high immediate costs.

If the program were administered through the schools, as is the case with the present system, distribution of loans to students most in need may not be accomplished unless sufficient funds to meet the additional financial needs are appropriated.

The unnecessary interest subsidy resulting from not charging interest during schooling and residency training would be removed. However, if interest accrues, payback problems for students would be exacerbated.

Administrative feasibility and possibilities for coordination with other health manpower objectives should be similar with this option to expanding the present Health Professions loan program.

The federal outlays for meeting MOD students' additional borrowing requirements over the next four years with non-subsidized Health Professions loans would be $347 million, as with the first option. However, in the long run, repayments would exceed outlays by $170 million, excluding the government's own interest costs. Assuming that student interest payments will equal government interest costs, then long-term net outlays would consist only of $12 million for defaults.

If capitation grants were eliminated, four-year outlays would be $543 million, but in the long run, repayments would exceed outlays by $267 million, excluding the government's interest costs. Assuming student interest payments equal government interest costs, long-term net outlays would be $19 million for defaults.

Relying on the Existing GSL Program

Under this option, MOD students would be aided by the existing program which insures loans made on the private market and provides federal funds to pay interest during school and to lower it to students thereafter. The special allowance interest subsidy would be raised administratively from 2.25 to 3 percent. However, serious difficulties in meeting future needs of MOD students for access to capital would remain.

Under the GSL program, needy students would probably continue to receive funds at least in proportion to their numbers. However, the funds available may simply not be sufficient for two reasons. First, the Congress and the Administration might be reluctant to raise limits high enough to meet maximum student needs which could be $7,000-8,000 annually per student. Second, raising loan limits alone is not likely to provide adequate financial assistance, even if the special allowance is raised, because of banks' reluctance to increase loans. Some assurance that defaults would be less frequent or repaid more quickly

would be needed. This suggests that a separate and more intensive recordkeeping and tracking system for MOD students be instituted as a method to lower default rates. Even with such changes, nonfederal guarantors (states and private agencies) may still impose lower loan limits.

Any interest subsidy to provide incentives to lenders, either at the current GSL rate or an increased rate, might be unnecessary in view of MOD students' ability to assume costs. Some way of delaying interest payment would be needed to eliminate the other unnecessary subsidy of payment of interest while the student is in school. The present GSL program does not provide for compounding of accrued interest and banks are therefore reluctant to lose income by delaying interest payments.

Similarly, the existing GSL program is not easily adapted to repayment of principal and accrued interest in any but the standard way of annual equal or decreasing instalments, since banks plan on certain income levels from their investments. Nor does it insure the borrower against high obligations if his income is low, short of default or bankruptcy. Larger loans, combined with the ten-year repayment period beginning soon after school, would exacerbate payback problems early in a new graduate's career, when income is lower. These repayment problems might influence students to choose specialties or types of practice which are more lucrative rather than those where additional manpower is needed.

Nearly all of the changes discussed above would require that OE establish special administrative procedures for MOD students. Treating MOD students differently from all others within the context of a general education program may not be feasible. Thus, if the existing GSL program is relied upon to meet MOD students' needs, the subsidy concept is most likely to be retained and higher loan limits are less likely. In addition, coordination with other health manpower policies might be difficult because of the separation of the GSL program from HEW-HRA, the agency that has primary responsibility for administering such policies.

Assuming payment of interest during school continues and the special allowance interest subsidy is raised to 3 percent of principal, the incremental federal outlays for meeting MOD students' additional borrowing requirements through the existing GSL program over the next four

years would be $56 million. The net long-term outlays for this option would be $164 million, of which $154 million is interest subsidies.[3] (The net federal outlays for GSLs, as opposed to direct loan options, rise over time because these loans originate from and are repaid to private lenders.)

If capitation grants were eliminated, four-year outlays would be $86 million and long-term net outlays would be $253 million.

A Separate Nonsubsidized GSL Program for MOD Students

A separate, nonsubsidized GSL program for MOD students would be modeled after the existing GSL program but administered by HEW-HRA. Loan limits would be much higher--possibly $8,000 annually--and most of the factors contributing to banks' reluctance to increase loan allocations could be dealt with. But the use of the private market virtually precludes other than conventional payback methods, thus leaving a choice between subsidies or heavy burdens on borrowers.

Needy students would probably get a proportional share of available funds, as they do now with GSLs. Some of the banks' objections to GSLs could be met by setting the interest rate at the equivalent of 10 percent now but allowing it to vary for individual borrowers over the life of the loan. (For example, it could be reset periodically at 4 points over the most recent short-term Treasury bill rate.) This may make large, long-term loans more attractive to banks. Likelihood of default, already reportedly low for MODs, would be minimized by their separation from other students. This separation would facilitate both tracking of MOD graduates and the use of the threat of exclusion from other federal programs such as medicare and medicaid for nonrepayment.

If students pay all interest during and after school, unnecessary subsidies would be eliminated. However, since interest alone on maximum loans of $8,000 annually could come to more than $3,200 by the student's fourth year of schooling, the program would have to allow for compounding so that banks would be willing to let interest accrue.

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3. None of these projections include the cost of the higher subsidy for GSLs currently made to MOD students, exclusive of their additional borrowing requirements, or for GSLs to any other students.

This separate, nonsubsidized GSL program for MODs might make acceptable to lenders a repayment period of 15 years, instead of the usual ten-year period. However, it would remain extremely difficult to prevent heavy burdens on borrowers because of the use of conventional methods of repaying principal and accrued interest. Graduated or income-related annual payments would therefore require an intermediary agency to finance the delay, and this would negate some of the advantages of using the private market (savings in administrative costs and capitalization). Thus choice of specialty and kind of practice could be adversely affected by very high initial obligations, and students would not be protected against lower than anticipated incomes.

This option's attractiveness to banks would be somewhat offset by the problems involved in still another set of forms and procedures. The reputation of the existing GSL program among banks is such that it would take strong administration and marketing to implement a MOD GSL successfully.

Some believe payback problems with an unsubsidized MOD GSL are themselves an advantage in pushing more students toward service scholarships, but this assumes that large numbers of NHSC members will be required. Conditioning schools' participation in a MOD GSL on their furthering distributional objectives would be facilitated by the location of this option in HEW-HRA.

An unsubsidized MOD GSL would entail only default costs. The four-year outlays for this option to meet MOD students' additional borrowing needs in the next four years would be $0.1 million. The long-term net outlays would be $17 million. If capitation were eliminated, four-year outlays would be $0.2 million and long-term net outlays would be $26 million.

A Direct MOD Loan Program With Income-Related Repayments

A direct loan program with income-related repayments would represent the greatest departure from current programs. This program could be operated directly by HEW-HRA or by a self-supporting agency that would raise its own capital and make loans to MOD students. The burden of fixed annual repayments with conventional loans would be substantially reduced for borrowers. Thus larger (up to $7,500 yearly and $30,000 in total), yet completely unsubsidized loans to be repaid in 20 years, could be made at interest rates at which the federal government borrows.

Distribution would not be a problem, if sufficient funds were available. Even if the program were operated privately, both students and institutions could be represented in the agency so as to guarantee access to all.

Initial levels of aid would depend on adequate capitalization. Risk of default and, therefore, reduction in available capital would be minimized by the separation of MODs from other students, facilitating both tracking and the use of the threat of exclusion from federally funded programs if debts are not paid. Interest rates at which the government borrows would ensure adequate returns, supporting future levels of available aid.

This option would maximize MOD students' ability to bear the costs of their own education, including interest.

The income-related payback feature would minimize borrowers' problems in the following manner: For each $1,000 borrowed, the student would sign an agreement to repay, for example, 0.3 percent of his future adjusted gross income.[4] Repayment would begin after school and continue for up to 20 years or until the borrower had repaid a maximum amount--the original loan plus interest and an insurance premium charged to all borrowers. The insurance premium would cover the portion of their debt that borrowers with future low incomes would be forgiven if not paid after 20 years. Thus undue burdens on graduates early in their professional careers would be eliminated. This might also encourage graduates to establish less lucrative primary care practices in low-

4. In practice, terms would be actuarily determined.

income areas because they would be relieved of heavy financial responsibilities. The insurance against the possibility of income too low to meet standard obligations should also encourage participation of students with low family incomes who might otherwise be reluctant to incur large debts.[5]

The experimental nature of this option could be a disadvantage. The income-related feature may be difficult to administer. However, administration would be facilitated compared with options that use the private market, because large numbers of lenders would not have to be dealt with. Operation by HEW-HRA or by a self-supporting agency directly involved with schools should facilitate coordination with distributional objectives.

Such coordination is important because a universally available loan program with income-related repayments could be more attractive than a service scholarship and thereby subvert efforts to improve geographic distribution. If legislation required schools, as a condition for receiving capitation grants, to set aside entry slots for those who agree to practice in an underserved area, the incentive to accept a service scholarship would be strengthened. Participation in the loan program could also be limited to those schools that agree to set aside a certain number of slots for service scholarships. However, if legislation does not require these slots to be set aside, it may be important to limit participation in the loan program to those schools which have met an assigned service commitment target.

The four-year outlays using this option to meet MOD students' additional borrowing needs would be $327 million. In the long run, repayments would exceed outlays by $315 million, excluding government interest cost. Assuming student interest payments equal government interest costs, there would be no long-term net outlays for this option because defaults and interest are included in the terms of the loans.

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5. A variant of this option that has been discussed would involve an income cutoff below which repayments would simply be cancelled, rather than a sliding scale. Although this form of low-income insurance would be considerably easier to administer, it would probably benefit very few borrowers. For the majority, repayments could be structured to rise over time, but at a uniform rate that would be less advantageous to those with lower incomes.

If capitation grants were eliminated, four-year outlays would be $513 million, and in the long run, repayments would exceed outlays by $494 million, excluding government interest costs. Again, assuming student interest payments equal government interest costs, there would be no long-term net outlays for this option.

If this option were operated by a self-supporting MOD loan agency, costs to the federal budget would be essentially start-up expenses, with or without capitation grants. These are estimated to be $5 million over a three-year period, to be repaid to the federal government. There would be no long-term net outlays.

CONCLUSION

Expenses of MOD students will increase more sharply over the next five years than financial assistance from all sources, including aid provided in legislation passed by the House or proposed by the Administration. The adverse effect on students from low-income backgrounds is likely to be exacerbated by a shift in the distribution of financial aid under either bill toward those from wealthier families. Moreover, inefficiencies exist in current loan programs relied upon by MOD students.

Five options for dealing with these problems through federally sponsored loan programs have been reviewed in this paper. Of two new alternatives, a direct MOD loan program with income-related repayments would be most likely to meet criteria of access to capital, efficiency, and effectiveness both in dealing with students' payback problems and encouraging primary care in shortage areas. Short-term outlays would be among the highest, but this option would be least expensive in the long run. A separate nonsubsidized GSL for MOD students could meet most of the criteria but severe student payback problems would remain. Both short- and long-term outlays would be among the lowest. Three other options, involving reforms in existing programs, would meet fewer criteria.